

## **ABSTRACT**

LARRISON, KATRINA HARRIS. Mindfulness for Self-care: An Introductory Course for Healthcare Students (Under the direction of Dr. Chad Hoggan).

The prevalence of burnout among healthcare providers is well documented. Its hallmark symptoms; emotional exhaustion, depersonalization, and a decreased sense of personal accomplishment, can impact a clinician's physical health, mood, therapeutic relationship with patients, and longevity in their profession. Research indicates that healthcare providers most susceptible to suffering from burnout are those who do not practice good self-care. Unfortunately, stress and diminished self-care are not limited to professional clinicians; students in training are at great risk for developing symptoms that may contribute to early burnout. The idea of self-care may seem elementary and natural, but in truth, it requires intentionality. An intentional approach to self-care that is rapidly gaining recognition is mindfulness. Dozens of studies highlight the positive impact a mindfulness-based program has on reducing stress and burnout in health professionals; and there is a growing body of knowledge reporting its positive effect on healthcare students. Two related problems exist in the current literature: the lack of an established mindfulness curriculum for healthcare students, and the limited focus on self-care in the courses that do exist. The purpose of this project is two-fold; 1) to create an introductory, for credit mindfulness course for healthcare students and faculty across all disciplines and degree levels that will foster the application of mindfulness to every-day life, and the establishment of good self-care habits; and 2) to understand the students' experience in the course. Using the AOTA's 2025 vision of promoting health, well-being, and quality of life through participation, as a guiding framework, the methodology for the project is divided into two parts: the course, and the study. The course design is based on Shapiro, et al.'s Mechanisms of Mindfulness and the

learning concepts, embodied knowledge and reflection; and guided by Morrison, et al.'s Components of Instructional Design. The study is steeped in a population health model and utilizes an elementary convergent parallel mixed method design with a quantitative repeated measure and a qualitative thematic analysis. Over the course of 16 weeks, five participants completed scholarly readings, experiential assignments, quizzes, and daily mindfulness practice, and participated in a weekly group discussion. Upon comparison of the pre-course and post-course Five-Facet Mindfulness Questionnaires, four of the five students self-scored an increase in trait mindfulness. Five themes with subthemes were identified from the participants' midterm and final reflective papers as representing the essence of their experience. These themes suggest that through the course, participants expanded their understanding of mindfulness and self-care, gained insight into themselves and their habits, began integrating both practices into their daily lives toward self-assessment, self-compassion, self-regulation, and self-improvement, and recognized the value of self-care in providing care for others. The themes provide evidence that the intent of the program was realized and that the students achieved the anticipated learning outcomes. Findings suggest the course is appropriate for different disciplines from associate to doctorate degree, that a daily 10-15 minute required practice is manageable and effective, and group discussion is paramount to mindfulness training. This study is the first to describe how associate degree students experience mindfulness education.

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Mindfulness for Self-care: An Introductory Course for Healthcare Students

by  
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A thesis submitted to the Graduate Faculty of  
North Carolina State University  
in partial fulfillment of the  
requirements for the degree of  
Master of Science

Adult and Community College Education

Raleigh, North Carolina

2018

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**DEDICATION**

To Robert, Robert, and Michaela  
who bring love, joy, and purpose  
to my life

## BIOGRAPHY

Katrina Harris Larrison was born in Charlotte, NC, but grew up in the rural community of Fairview, NC. In her childhood, she enjoyed building playhouses in the woods, playing school where she was the teacher, participating in sports, and learning practical skills like splitting wood, canning vegetables, and fixing things through resourcefulness. Diagnosed with scoliosis and prescribed a back brace at the age of 14, Katrina was challenged with finding creative ways to continue playing sports and engage in adolescence. This experience inspired her to become a therapist to help others adapt and participate in life in the midst of mental or physical insult.

In 1990, Katrina graduated from East Carolina University with a Bachelor of Science degree in Occupational Therapy. She worked in adult rehabilitation in the Raleigh-Durham area, specializing in spinal cord injury, for several years before switching to PRN status to become a stay-at-home mom. In 2003, as a conservative approach to managing herniated discs, Katrina began practicing yoga; and in 2009, completed the yoga teacher training certification, RYT-200 to help others form healthy relationships with their bodies toward wellness.

She currently lives in Indian Trail, NC with her husband, Robert and her two almost grown children, Robert and Michaela. Katrina is an adjunct instructor in the OT Assistant program at Cabarrus College of Health Sciences and teaches weekly yoga and group fitness classes at a local gym. She enjoys swimming, the outdoors, reading, and spending time with her family.

## ACKNOWLEDGMENTS

I am forever grateful for the support and encouragement of so many people while completing this thesis: patient family members, faithful friends, interested colleagues, adventurous students, and accommodating strangers.

To my thesis committee, Dr. Chad Hoggan, Dr. Duane Akroyd, and Dr. Michelle Bartlett, and to Dr. Susan Barcinas - thank you for equipping me with the knowledge and skills to conceptualize and carry out this project.

To my husband, Robert Larrison, Jr. - thank you for your patience and quiet leadership in all things, your big picture view of the world, your unconditional love and commitment to my best interest, and an endless supply of reassurance and cheerleading. I love you dearly.

To my son, Robert Larrison, III - thank you for being a walking encyclopedia, for spot-on imitations that keep me in stitches, for your debate readiness at any time of day or night, for being “quiet”, and for helping me move my workspace. I love you, Berto.

To my daughter, Michaela Larrison - thank you for your open mind and adventurous spirit, for your strength and objectivity, for listening and giving insightful feedback, for your creativity and attention to detail, and for sharing walks to class with me. I love you, Fluffy.

To my friend, Stan Martin - thank you for constantly challenging my perspective, listening to my endless theoretical monologues, forgiving my bossiness, and being my friend.

To the five study participants – thank you for your commitment and willingness to explore, for your rich experiences, laughter, and insight, and for making this project possible.

To Nancy Schneidenbach Green - thank you for embracing my idea from the first moment and never ceasing to encourage me, for showing me how to let students learn through experience, and for being a shaker and a mover in healthcare education.

To CCHS President, Dr. Diane Snyder and Provost, Dr. Meg Patchett - thank you for trusting me with your students and so graciously opening your doors to me for this project.

To my parents, Robert and Ruby Harris – thank you for teaching me the value of hard work and doing things right, for modelling creativity and resourcefulness in solving problems, and for instilling in me a life-long desire to learn and wonder.

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Mindfulness is simply...

Being aware of what is happening right now without wishing it were different;

Enjoying the pleasant without holding on when it changes (which it will);

Being with the unpleasant without fearing it will always be this way (which it won't)

James Baraz

## CHAPTER ONE

### INTRODUCTION

#### Background and History

The prevalence of *burnout* among healthcare providers is well documented (Schure, Christopher, & Christopher, 2008; Sorenson, Bolick, Wright, & Hamilton, 2016). In a recent and comprehensive literature review of 43 articles, Sorenson, et al. (2016) found a broad range of health professionals from multiple practice settings reporting *compassion fatigue* and its related syndromes: burnout and *compassion stress*. The hallmark symptoms of burnout include: emotional exhaustion, depersonalization, and a decreased sense of personal accomplishment; all of which can impact a clinician's physical health, mood, therapeutic relationship with patients, ability to express compassion and empathy, quality of job performance; and longevity in the profession (Goodman & Schorling, 2012; Martin-Asuero, et al., 2014; Sorenson, et al., 2016). From a healthcare industry point of view, burnout among caring professionals is a significant problem that not only impacts the individual provider, their patients, their family, and their career; but, also the availability of capable clinicians to meet the needs of the workforce (Kreitzer and Klatt, 2016). Considering the costs of medical errors, missed work, reduced patient satisfaction, and transference of stress to teammates; practitioner burnout translates into much larger safety and financial issues (Goodman & Schorling, 2012; Martin-Asuero, et al., 2014).

Stressors that contribute to the development of burnout can originate both internally and externally. Perfectionistic personality traits, critical self-talk, limited emotion regulation, and negative past experiences are examples of internal stressors (Dobkin, Bernardi, & Bagnis, 2016). External stressors vary greatly, depending on the clinical setting, and may

include: interpersonal conflicts with teammates, high productivity standards, documentation requirements, gravity of patient illness, fear of litigation, and perceived lack of self-determination (Dobkin, et al., 2016; Sorenson, et al., 2016). Myers (2017) highlights additional external stressors that are heavily experienced by nurses: length and change of shift hours, fluctuations in health status of patients, changes in reimbursement, and public scrutiny.

Performing complex clinical tasks while providing physical and emotional support to patients and their family members is central to the role of a health professional, yet many identify this responsibility as a significant source of stress (Sorenson, et al., 2016). Additionally, the causal relationship between fatigue, low mood, and *mind wandering* can magnify the feelings of stress and contribute to a clinician being less mentally focused and more vulnerable to making errors (Smallwood, Mrazek, & Schooler, 2011). Newsome, Waldo, and Gruszka (2012) and Shapiro and Carlson (2009) concur; healthcare providers most susceptible to internalizing stress and suffering from burnout are those who do not practice good *self-care*. Interestingly, professionals from multiple disciplines identify self-care as the most effective tool for preventing compassion fatigue and related stress syndromes (Sorenson et al., 2016). In 2014, the National Center for Integrative Primary Healthcare (NCIPH) charged an interdisciplinary team of professionals with the task of developing a set of core competencies and educational programs that would eventually become mandated in the education of primary care providers (Kliger, et al., 2015). Of the 10 “meta-competencies” identified, the eighth directly addresses self-care; “Engage in personal behaviors and self-care practices that promote optimal health and well-being” (Kliger, et al., 2015, p. 37).

The idea of self-care may seem elementary and natural, especially among people who are drawn to and trained in the profession of taking care of others; but in truth, it requires intentionality. Prioritizing time for self may be more difficult for health care practitioners because they must overcome the, "...culture that has dominated much of education ...where students have been expected to forego personal needs, endure stressful environments, and emerge from highly competitive and often dysfunctional environments to work in care settings where health and wellbeing is also largely ignored" (Kreitzer & Klatt, 2017, p. 154).

An intentional approach to self-care that is rapidly gaining recognition is *mindfulness*. The practice of mindfulness has existed in Eastern spiritual traditions for 2500 years as a means of reducing suffering; but not until 1979 when molecular biologist, Jon Kabat-Zinn developed his *Mindfulness-Based Stress Reduction (MBSR)* program, did it begin to gain attention in the West as a valuable tool for reducing stress and managing illness (Moore, 2008; Newsome, et al., 2012). Studies abound on the positive psychological and physical effects a mindfulness practice has on patients experiencing chronic pain, illness, depression, anxiety, addiction, and other mental health disorders (Goldberg, Del Re, Hort, & Davis, 2014; Schure, et al., 2008; Stew, 2011).

Recently, researchers have discovered its benefit toward reducing stress and burnout in health professionals (Dobkin, et al., 2016; Goodman & Schorling, 2012; Sirgy & Jackson, 2015). Clinicians are reporting significant improvements in mental health, emotional exhaustion, depersonalization, capacity for empathy, and personal accomplishment after completing a MBSR or similar course; gains attributed to the constructs of mindfulness that encourage awareness, presence, non-judgment, and non-reactivity (Dobkin, et al., 2016; Goodman & Schlorling, 2012; Martin-Asurero & Garcia-Banda, 2010; Martin-Asurero, et

al., 2014). In a review of eight studies between 2004 and 2014 that conducted randomized controlled trials to measure the effect of a mindfulness-based program on job burnout, Luken and Sammons (2017) found strong evidence that mindfulness practice is effective in reducing burnout in healthcare workers and educators.

In addition to reductions in the defining symptoms of burnout, healthcare professionals who have engaged in a mindfulness training course have reported positive changes in self-care, awareness and being present, and professionalism (Martin-Asurero, et al., 2014); reduced stress, improved communication, reduction in judgmental attitude, and improved emotion regulation (Dobkin, et al., 2016); and reduced negative affect, decreased rumination, and reduced distress (Martin-Asuero & Garcia-Banda, 2010). Newsome, et al. (2012) go one step further to identify mindfulness as a valuable form of self-care, and one that can be taught experientially in a group format. Occupational Therapists practicing in the Mental Health arena identified “taking care of self” as vital for being able to extend care to clients (Reid, Farragher, & Ok, 2017, p. 287).

Unfortunately, stress and diminished self-care are not limited to professionals already working in their respective fields; students in training are at great risk for developing symptoms that may contribute to early burnout (Larrison, 2017). Sleep deprivation, time commitment, financial sacrifice, highly competitive academic standards, and the stress of transitioning classroom knowledge into clinical skills can converge on a student, causing high amounts of anxiety, low levels of life satisfaction, and decreased ability to express empathy, a key ingredient to professional development (Barbosa, et al., 2013; Bonifas & Napoli, 2014; Halland et al., 2015). Spadaro and Hunker (2016) identify an additional and very common stressor to students who may be pursuing a healthcare degree as a second

career; that of balancing their role as student with already assigned roles of spouse, breadwinner, employee, parent, and caregiver. In a study of U.S. medical students, Dyrbye, et al. (2008) found that as burnout and suicidal ideation increase, the capacity for empathy declines (as cited in Bond, et al., 2013). Fortunately, there is a growing number of researchers interested in the impact mindfulness has on students training to become tomorrow's physicians and allied health professionals (Larrison, 2017).

### **Statement of the Problem**

Two related problems exist in the current literature that led me to investigate and suggest a solution. The first is the lack of an established mindfulness curriculum for healthcare students across all disciplines, and the second is the limited focus on self-care in the courses that do exist. A background explanation is needed to fully understand these problems and recognize the opportunity for positively impacting the personal, educational, and future professional experiences of healthcare students.

### **Inconsistent Curriculum**

Formal mindfulness training for healthcare professionals has come from a variety of sources. However, for the most part these sources are based at least loosely, on the widely implemented and well-researched MBSR program (Crane, et al., 2016; Schure, et al., 2008). The program has a 37-year history of helping people from all walks of life manage stress and illness and improve wellness (Kabat-Zinn, 2016). The course follows a standard curriculum developed and honed by its founder; and is taught by trainers certified through the MBSR training program (UMASSMed, 2017b). Because to date, there is not a national or international accrediting or licensing body that governs the teaching of mindfulness, well-meaning professionals from a variety of disciplines have tweaked, modified, and in some

cases completely changed the MBSR format and content, causing the last two decades to be a bit of a free-for-all when it comes to how and why to teach mindfulness, who should teach it, and to whom it should be taught.

Some of the changes may be extremely helpful and warranted, but it is impossible to discern because, from a course design standpoint, apples are being compared to oranges and sometimes avocados; and from an outcome view, track times for a variety of distances are being compared for several engine sizes under a multitude of different road conditions. Because of the unique needs of students related to maturity level, year in the program, discipline specific training, already full curriculums, need for college credit, and challenging class and clinical schedules, this inconsistency problem has been magnified.

### **Limited Focus on Self-Care**

In reviewing the literature of mindfulness courses specifically designed for healthcare students, 28 were examined for design, content, focus, and outcome. Only seven identified the enhancement of self-care as a purpose or objective; and no study measured this quantitatively or specifically inquired about it qualitatively. This seems counterintuitive, given the clear identification of self-care as an effective tool for preventing and reducing burnout in healthcare professionals. Related to this focus, one program established student well-being as a primary objective. Four courses reported improved self-care as qualitative findings, while four others found outcomes of improved health, well-being, or quality of life. This leaves 20 programs or 71%, focusing on other outcomes, most of which are related to measuring a variety of psychological symptomology.

### **Purpose of the Study**

The purpose of this study is two-fold; 1) to create an introductory three-semester credit hour mindfulness course that is appropriate for healthcare students and faculty across all disciplines at all degree levels for Cabarrus College of Health Sciences (CCHS), that through its highly experiential design, will foster student understanding and integration of mindfulness as both an intentional practice and an embodied way of knowing, and facilitate student recognition and establishment of good self-care habits; and 2) to understand student experiences as they relate to the learning outcomes of mindfulness and self-care.

### **Significance of the Study**

As discussed in the background and history, burnout is a significant problem for the U.S. healthcare industry. This arena already faces workforce challenges created by population growth, increasing numbers of elderly clients, expanding treatment of chronic illnesses, increased access to healthcare by the Affordable Care Act, upward creeping of degrees required for entry-level professional practice, rising cost of education, shortages of primary care providers, and a staggering distribution problem that leaves most rural and economically challenged counties grossly underserved (Knickman & Kovner, 2015).

Most of these workforce challenges must be addressed through creative delivery models and long term, widespread policy changes. Burnout, on the other hand, can potentially be reduced in the relative short term. As discussed above, after eight short weeks, clinicians are experiencing preventative and reduced symptom outcomes through learning to pay attention in a deliberate and routine way. Integrating this learning into healthcare curricula could have both an immediate and future impact on the strength of the U.S. healthcare workforce and the quality of care it delivers.

The significance of this study is two-fold. First, it lays the groundwork for translating the course “IHS 350 Mindfulness for Self-Care” into a fully online version capable of reaching more students. With two formats available, the course may become a viable elective for any of the programs offered at CCHS from Certificate to Master’s degree. Secondly, by increasing student access to the course, it creates opportunities to study its effect on a larger scale and make meaningful contributions to the body of knowledge.

### **Mindfulness Defined**

Theravadin scholar and monk, Bhikkhu Bodhi uses four interwoven definitions to translate the Pali words, *sati* and *sampajaña*, into the English term, mindfulness (Shapiro & Carlson, 2009). Awareness, circumspection, discernment, and retention, are required to understand mindfulness as, “... both a process (mindful practice) and an outcome (mindful awareness)” (Shapiro & Carlson, 2009, p. 4). Jon Kabat-Zinn, creator of MBSR, defines mindfulness as, “awareness, cultivated by paying attention in a sustained and particular way: on purpose, in the present moment, and non-judgmentally” (Kabat-Zinn, 2016, p. 1). Shapiro and Carlson (2009) expand on this definition by describing mindfulness as an embodied knowing that allows a person to experience each moment of life for what it truly is, versus through a conditioned desire for it to be something different.

### **Tenants of Mindfulness Practice**

A mindfulness practice is based on three interdependent tenants, each driving, defining, and refining the others (Shapiro & Carlson, 2009).

**Intention.** The intention with which a person approaches their mindfulness practice, influences the scope of possible experiences (Kabat-Zinn, 1990; Kabat-Zinn, 2013; Shapiro & Carlson, 2009). Intention does not mean a fixed plan, focused on a specific outcome; but

rather, a flexible starting point that is receptive to both immediate awareness and the possibilities brought by future insights (Kabat-Zinn, 2003; Shapiro & Carlson, 2009). Intention sets the direction for one's practice, not a particular destination; and reminds the student of his purpose in meditating (Kabat-Zinn, 1990). Intention has been shown to evolve with continued practice as the meditator's awareness offers new insights and expanded capabilities in self-regulation; opening doors for greater self-exploration and ultimately, *self-liberation* (Shapiro, Carlson, Astin, & Freedman, 2006). A medical student may initially begin practicing mindfulness with the intention of reducing stress, but in the process, expands his intention to include being more present when listening to patients describe their pain (Kabat-Zinn, 1990).

**Attention.** Alertness and focused attention are key ingredients to a mindfulness practice and allow a person to experience, through all senses, the arrival and departure of every moment; thus, mindfulness is very different from relaxation where the goal may be to diminish attention (Kabat-Zinn, 1990; Kabat-Zinn, 2013; Shapiro & Carlson, 2009). Attention refers to the paying attention to all aspects of every moment, those that originate within the person, as well as those applied from without (Shapiro, et al., 2006). Shapiro, et al. (2006) postulates that several attention skills are strengthened in mindfulness practice including the capacity to sustain attention, the ability to shift attention from one input to another, and the ability to curb the onslaught of associated thoughts, feelings, and emotions that often accompany and distract from the original focus of attention. They believe that the enhanced self-regulation that often results from consistent mindfulness practice is facilitated by the collective improvement of these attention skills (Shapiro, et al., 2006).

**Attitude.** A person's attitude toward attending is paramount, not only for perceiving reality, but for cultivating self-care (Shapiro & Carlson, 2009). A judgmental or negative attitude will certainly limit one's openness to experiencing new thoughts or sensations, just as an overly romanticized attitude toward paying attention can cause a person to strive toward an end goal versus valuing the work along the way (Kabat-Zinn, 1990; Kabat-Zinn, 2013). Seven attitudes form the foundation of a mindfulness practice: non-judging, patience, beginner's mind, trust, non-striving, acceptance, and letting go (Kabat-Zinn, 1990; Kabat-Zinn, 2013). From these attitudes, additional perspectives arise such as gratitude, forgiveness, empathy, nonreactivity, curiosity, and loving-kindness (Kabat-Zinn, 2013; Shapiro & Carlson, 2009). The importance of bringing such "'heart' qualities" into attention, is artfully expressed in the Chinese language; as mindfulness translates to the character for *heartfulness* ( 念) (Shapiro & Carlson, 2009, p. 11).

### **Mindlessness, Suffering, and Ethics**

The opposite of mindfulness, *mindlessness*, is characterized by an altered perspective that ruminates about the past, worries about the future, or operates on auto-pilot, bouncing back and forth between learned reactions (Newsome, et al., 2012). These dulled states of consciousness often promote counterproductive emotions and behavior that diminish a person's ability to get to know their true self, and how to best practice self-care (Larrison, 2017). Buddhism teaches that striving for something different than the here and now, creates suffering (Shapiro & Carlson, 2009). Kabat-Zinn (2016) highlights three destructive mind states that Buddhist philosophy simply labels as "poisons" that create suffering (p. 108).

**Greed.** Greed is the state of mind that fosters the thought that all desires should be fulfilled, every want satisfied. It also drives the human mind to want to hold on to pleasant

things to make them last, to preserve them, and become attached to them. When objects, people, or relationships cannot be achieved or maintained, a person operating in this state of mind feels let down, empty, or like something is missing (Kabat-Zinn, 2016).

**Aversion.** Aversion is on the other end of the spectrum from greed. This state of mind urges a person to avoid interaction with events, people, ideas, or things that he has previously deemed annoying, distasteful, boring, or uncomfortable. In routinely avoiding experiences based on likes and dislikes, it is easy to see how a person's life can exist only in the vacuum of comfort and familiarity.

**Delusion.** "...delusion is the exact opposite of wisdom" (Kabat-Zinn, 2016, p. 113). This toxic state of mind allows a person to create false narratives of what is happening in the present moment, leading to a misinterpretation of other people's motives and actions, and possibly, expecting or creating unrealistic or unfounded outcomes (Kabat-Zinn, 2016).

**Adventitious suffering.** Adventitious suffering is additional suffering that a person brings upon himself out of lack of awareness (Kabat-Zinn, 2016). The world delivers plenty of hardship to people that is beyond their control, but the choice to add misery lies solely in the hands of the individual. In other words, "...while pain may be inevitable, the suffering that accompanies it is optional" (Kabat-Zinn, 2016, p. 95). The destructive mind states described above as well as emotional reactivity can create additional anguish on top of the original insult. According to Kabat-Zinn (2016), it is this type of suffering that accounts for most of the strife people experience in their lives.

Mindfulness, then, reduces suffering by allowing a person to acknowledge all thoughts and experiences as they arise; and with attentive presence, discern, "...which aspects of mind are wholesome (those leading to the well-being of self and others) and which

are unwholesome (those leading to the suffering of self and others)” (Shapiro & Carlson, 2009, p. 6). This discernment, which promotes insight into self, is an ethical exploration versus a judgment, as it is grounded in attitudes of acceptance and patience (Shapiro & Carlson, 2009). Because acceptance and patience are based on an intentional inquiry of the present moment, being mindful is very different from being passively reconciled to life’s events (Shapiro & Carlson, 2009).

### **Selfing**

Just as Buddhist philosophy discourages greed in the form of attachment to things and ideas, it encourages a person to not become attached to self as a permanent construct (Kabat-Zinn, 2016). This may seem difficult to understand because the human body is a physical thing made of matter; but when the millions of experiences that happen to this physical thing, that also involve thought, feelings, emotion, and spirituality, are considered, it makes sense that it cannot possibly be a fixed entity. The downside of becoming attached to a certain belief in or view of self lies in the missed opportunities to evolve beyond that ideal, and in the suffering that claiming self as the center of the universe, creates for others. Mindfulness encourages a person to acknowledge the obsession he has with himself and his identifications of I, me, and mine (Kabat-Zinn, 2016).

### **Formal Versus Informal Practice**

Formal mindfulness practice is an act of discipline, characterized by daily engagement in a specific meditation activity for the purposes of deepening one’s experience, developing endurance, and building skills and strategies (Kabat-Zinn, 2013; Kabat-Zinn, 2016; Shapiro & Carlson, 2009). Examples of formal practice include: yoga meditation, sitting meditation, body scan, walking meditation, qi gong (an ancient Chinese exercise art,

similar to Tai Chi, that synchronizes movement, breath, and mind focus to cultivate life energy toward healing and wellness (Theriault, 2017)), and breathing meditation; all of which can be completed independently or with the aid of a guide. Informal practice is the implementation of mindfulness into the activities of daily life (Kabat-Zinn, 2013; Kabat-Zinn, 2016; Shapiro & Carlson, 2009). Examples are endless and may include: mindful eating, washing dishes, interacting with co-workers at a meeting, driving, treating patients, and watching a child's sporting event. Every moment in life is an opportunity to practice mindfulness toward the practice of truly living every moment in life (Kabat-Zinn, 1990; Kabat-Zinn, 2013).

### **Basic Neuroscience of Mindfulness**

Positive changes in diagnostic imaging and laboratory tests correlate with self-reported quantitative and qualitative data that suggest mindfulness meditation improves physical, emotional, and cognitive functioning (Kabat-Zinn, 2013). These outcomes are primarily due to the effect meditation has on the amygdala, the primitive brain structure responsible for evaluating and responding to perceived threats (Kabat-Zinn, 2013). This deep structure is only capable of reacting with one of two responses, fight or flight. Other responses depend on the workings of the pre-frontal cortex, where executive cognitive functioning conducts an expanded appraisal, and arrives at a more suitable reply.

Researchers continue to discover positive correlations between mindfulness practice, improved behavior, and neurophysiological changes. Goldin and Gross (2010) applied an MBSR course to patients diagnosed with social anxiety disorder and found reduced anxiety and depression, improved self-esteem, decreased amygdala activity, and increased stimulation in brain regions responsible for attention. Following an eight-week MBSR

course, functional MRI brain imaging studies showed actual thickening of brain matter in areas responsible for emotion regulation, sense of self, learning, and appraisal (Hölzel, et al., 2011a). Similar studies showed thinning of the amygdala structure after an eight-week course, which correlated with a reduction in perceived stress (Hölzel, et al, 2010). In a study of adults age 55-85, Davidson, et al. (2003) reported decreased loneliness and a reduction in inflammatory genes found in blood samples, following an MBSR intervention. Tang, Hölzel, & Posner reported reduced activity in the “prejudice network”, the area of the brain associated with implicit bias, after a MBSR course (as cited in Burgess, Beach, & Saha, 2016, p. 2).

### **Mindfulness-Based Stress Reduction Described**

**Origin and purpose.** Developed in 1979 by Jon Kabat-Zinn at the University of Massachusetts Medical Center Stress Reduction Clinic, MBSR is a systematic program that helps people explore and get to know their own minds and bodies; toward restoring and promoting physical, emotional, and mental well-being (Kabat-Zinn, 1990; Kabat-Zinn, 2013; Kabat-Zinn, 2016). Several medical centers across the country, with integrative medicine departments, currently offer an MBSR course as a complementary and alternative medicine modality. MBSR is not just for patients suffering from mental or physical disease; its educational and experiential design has allowed it to become a house-hold resource for people of all ages, backgrounds, and levels of function (Kabat-Zinn, 2016). MBSR courses can easily be found in churches, community centers, professional continuing education, employee training and development, and even online.

**Format and content.** The MBSR program is an eight-week course where participants meet in a group format for 2.5 hours, one day per week. Each session consists of

one or more formal mindfulness practices; lecture and discussion that introduces the constructs and basic neuroscience of mindfulness; supportive group sharing about experiences and insights; and home practice assignments that include formal practice as well as informal practice and reflection activities (UMASSMed, 2014). Participants are asked to complete 45 minutes of formal practice (gentle yoga, body scan, sitting meditation, or walking meditation) and 15-20 minutes of informal practice (awareness of unpleasant events, pleasant events, breath, routine daily activities, and communication), six days per week; and are provided with audible guides to support their home practice (UMASSMed, 2014). Additionally, between weeks six and seven, group members participate in an all-day, seven and one-half hour, silent retreat, during which they experience multiple formal practices.

### **Self-Care Defined**

#### **Components of Self-Care**

Self-care is often viewed as a one-dimensional act of engaging in behaviors that tend to one's basic needs such as eating "right", exercising, taking time to relax, avoiding toxic substances, and getting "enough" sleep. A more accurate interpretation of self-care is that of a multi-dimensional construct that requires self-awareness, intention, and self-compassion. The American Heritage Science Dictionary defines self-care as, "The care of oneself without medical, professional, or other assistance or oversight" (Self-care, n. d.). In other words, the recipient of the care is oneself, and the responsibility to ensure this care rests upon the provider, who is also the self; thus, some level of self-awareness is required to know when care is needed or perhaps when the level of expertise to administer that care is beyond the scope of the self.

Raphailia Michael (2016), a certified counselling psychotherapist who utilizes mindfulness as a tool toward holistic treatment, defines self-care as, “Any activity that we do deliberately in order to take care of our mental, emotional, and physical health” (p. 1). There are hundreds to thousands of activities that may qualify as self-care; and they are intentionally carried out by the self toward restoring, maintaining, or enhancing one’s mind, body, and spirit. Self-awareness enters the equation for the purpose of choosing appropriate and properly dosed acts. Michael (2016) believes that participating in activities or rituals that one does not enjoy, perhaps out of obligation or obedience, is not self-care. Agnes Wainman, a registered clinical psychologist summarizes this well, “Self-care is something that refuels us rather than takes from us (as cited by Michael, 2016, p. 1). The “enough” in sleep and the “right” in eating are not just individual choices, they are prescriptions by the self for the self, that are steeped in awareness, intention, and compassion.

### **A Philosophy of Self-Care Beyond Self**

French philosopher, Michel Foucault, who frequently referenced the ethical development of Ancient Greek and Roman societies in his writings about self-care, believed caring for oneself requires knowing oneself (Markula, 2004; Robinson, n. d.). At the same time, Foucault suggested that the knowing that comes from caring for the self is actually the goal of self-care (Foucault, 1998); and this knowledge can and should be translated into caring for others and contributing to the greater good (Markula, 2004; Robinson, n. d.). In his writings on care of the self in a *knowledge economy*, Drummond (2003) references Foucault’s *technologies of the self*, those activities that one prescribes for himself in order to become the best version of himself physically, mentally, and ethically, to warn that while those improvements stand to serve the self and the collective, their requirement cannot

impose upon the individual the idea that the self is always an “economic work-in-progress” (p. 61).

Going further, he denounces such a knowledge economy that through its mandated competencies, numerical outcomes, and insistence on a single-minded truth, actually impedes learning and development in the students it is so desperately trying to teach (Drummond, 2003). Drummond (2003) specifically addresses those responsible for educating student nurses, reminding them of their ethical role in honoring care of the self, care of knowledge, and care of the other. He writes, “The professional act of caring is not only about what can be verified. It is also about the attachment of the carer to the human condition, to a philosophy of both the individual and the collective, that while it may prove difficult (or even impossible) to define comprehensively, may nevertheless withstand the vagaries of economic rationalism” (Drummond, 2003, p. 65).

This viewpoint translates into the role of healthcare workers and for the purposes of this research, into the training of healthcare students. The economic value of practicing self-care may not always be recognized in the outcome and financial measures the healthcare industry employs to gauge success. But, when viewed through the ethical lens of balancing care of self, care of knowledge, and care of others, recognizing its worth is unavoidable. Every healthcare discipline teaches the importance of preventative health, the use of restorative measures in time of illness, and the education of patients toward taking responsibility for their own health and becoming their own best advocate (knowledge). There is not a hospital board of directors in the world that would say they try to avoid delivering best practice care to their patients. It is the expected standard of provision (others). Similarly, successful hospital systems encourage employee wellness by offering

discounts in gym memberships, onsite health screenings, ample paid time off, bereavement leave, even healthy food choices in the cafeteria (self).

As an example of Drummond's (2003) three-part ethical view of self-care, consider an employee who eats the heart healthy meal every day for lunch at work, but continues to smoke three packs of cigarettes a day. There is a disconnect between the care of self and the care of the knowledge she holds as a nurse. A further disconnect can occur in her role of caring for others when she calls in sick to treat the problems associated with smoking; her teammates experience the stress of assuming a heavier workload, and as a result, her patients inevitably receive a reduced quality of care. The example of poor habits she sets for her family, her co-workers and even patients create a disconnect for them as well, as they try to understand why a woman who treats patients suffering from heart attack and stroke all day would choose to smoke.

Equally as troubling, consider a therapist who has very high patient satisfaction scores, is well-liked by her peers, routinely provides valuable interdepartmental evidence-based practice seminars on her own time, and consistently arrives to work 30 minutes before her shift and departs up to 90 minutes after her scheduled workday has ended. Recently she has lost interest in leaving the house outside of work, feels sad and worried most of the time, has developed Type II Diabetes as her weight gradually crept up after turning 40, and is considering her husband's request to separate because she has no idea how her marriage reached this point or how to fix it. In this scenario, the care of her patients has greatly tipped the scale away from caring for herself. The knowledge she holds as a therapist about work/life balance, energy conservation, and the importance of nurturing relationships is all lost on her and is not being translated into care of self. In this light and from what Foucault

learned from Ancient Greece, every person, healthcare provider or other, has a personal and societal responsibility to get to know thyself and practice good self-care.

### **Associates of Self-Care and Mindfulness**

**Self-compassion.** “Self-compassion is simply compassion directed inward, relating to ourselves as the object of care and concern when faced with the experience of suffering” (Neff, 2003). A positive correlation has been found between self-compassion and mindfulness (Neff, 2003). Research suggests that mindfulness is a pre-requisite for self-compassion, and the positive outcomes of MBSR interventions may be attributed to the development of self-compassion (Hölzel, et al., 2011b). Neff (2003) suggests that mindfulness serves as one of three components of self-compassion, along with self-kindness and common humanity. The ability to treat oneself with kindness and forgiveness in the midst of a short coming exemplifies emotion regulation, thus self-compassion and emotion-regulation are believed to be highly correlated (Hölzel, et al., 2011b).

**Self-regulation.** Self-regulation refers to, “control by oneself or itself, as in an economy, business organization, etc., especially such control as exercised independently of governmental supervision, laws, or the like” (Self-regulation, n. d.). Hölzel, et al. (2011b) suggests that self-regulation is made possible through the interconnectivity of four individual capacities: “1) attention regulation, 2) body awareness, 3) emotion regulation as both reappraisal and exposure, extinction, and reconsolidation; and 4) change in perspective on the self”, all of which are positively influenced by the practice of mindfulness (p. 539). Gockel (2015) believes mindfulness training promotes self-care and self-regulation by enhancing self-awareness.

**Self-awareness.** In his book, Emotional Intelligence, psychologist Daniel Goleman (2006) defines self-awareness as, "...a sense of an ongoing attention to one's internal states" (p. 46). He qualifies this attention as an objective one, not influenced by emotions or feelings (Goleman, 2006). It is not by mistake that Goleman discusses self-awareness in his fourth chapter, entitled, "Know Thyself", implying that self-awareness is a form of knowing self. Goleman reinforces the strong relationship between self-awareness and self-care. Because mindfulness is awareness (Kabat-Zinn, 2016), it is easy to see how the practice of mindfulness can enhance self-care.

### **Evolution of An Idea**

The road to my thesis literally began in the first Adult and Community College Education class I took as a post-baccalaureate student at North Carolina State University (NCSU). In Dr. Hoggan's "The Adult Learner", I was introduced to *embodied learning* and *embodied knowledge* through the writings of Freiler, Michelson, and Lawrence. I learned about Michael Polanyi's work on *tacit knowledge*, Merleau-Ponty's ideas about how we make meaning of experiences, Gendlin's beliefs in the *felt sense*, and Jordi's reassessment of reflection. I learned about situated cognition and David Schön's work on *reflection-in-action*; and most importantly, I came to understand the value of experience in learning.

These concepts landed on me like a best friend who had moved back next door. They allowed me to make sense of the knowledge and understanding I had felt in my body since adolescence. At that time in my youth, this awareness had not yet been interpreted on a cognitive level; but through the assigned readings and forums I shared with my NCSU classmates, I recognized its influence on me as a young athlete in training. When x-rays to rule out a bone evulsion revealed instead a diagnosis of scoliosis, my embodied knowledge evolved to a much deeper way of knowing that allowed me to adapt to the physical demands

of wearing a back brace for 23 hours a day, cope with the spatial and social challenges the brace presented over four years of high school, and discover modified techniques to remain competitive in my sports. Later, while competing as a Division I athlete, I realized my fascination with how mind and body work together to produce opportunities for growth; and set my course toward becoming an occupational therapist with the hope of helping others learn to adapt, accommodate, and cope with the impact of physical and mental insult. Ten years ago, when the aging process created new problems for my back, it was that desire again, to find new ways of moving and being in myself, that led me to yoga and to becoming a yoga instructor. Guiding and watching my patients and students develop a loving and respectful relationship with their bodies and find connections between mind, body, and spirit, perhaps for the first time in their lives, is a joyful and rewarding experience for me.

By the midpoint of “The Adult Learner” class, I knew I wanted to apply to the program, that I wanted to pursue the Master of Science degree so that I could research these concepts, and that I had found the next phase of my career; teaching healthcare students. Every class I took reinforced this belief and gave me the opportunity to explore and develop the idea for my thesis. In Dr. Barcinas’ “Foundations in Adult Education”, my research paper focused on bringing embodied learning activities into the adult classroom. Dr. Akroyd’s “Research in Adult and Higher Education” allowed me to do a literature review on the use of yoga in the treatment of veterans suffering from PTSD. In Dr. Akroyd’s “Issues and Trends in Education for Health Professions” I researched how mindfulness is currently being presented to healthcare students, and decided I wanted to do it a little differently. Because I had never designed a course before, I enrolled in Dr. Bartlett’s “Designing Instructional Systems in Training and Development”, where I gained the confidence that I

could do this, and through which I met the instructional designer that would eventually help get my course through an institution's approval process. My thoughts and writings from these classes continue to inform my decisions about this project, and some have made their way into this document.

In the Spring of 2016, at the same time I had started taking classes at NCSU, I began teaching in a very small adjunct role at Cabarrus College of Health Sciences (CCHS) in the Occupational Therapy Assistant (OTA) program. CCHS is a small health sciences college located in Concord, NC on the campus of Carolinas Healthcare System – Northeast. It currently enrolls 470 students who are pursuing associate degrees in pharmacy and surgical technology, medical assistant, OTA, and nursing; Bachelor's degrees in medical imaging, nursing, and interdisciplinary health studies; and master's degrees in Occupational Therapy (OT). My roles included providing input through the OTA Advisory Committee; consulting on content for the yoga teacher certification courses and developing new content and sharing teaching responsibilities in the OTA mental health and pediatric courses.

The chairperson of the OTA department, Nancy Green, took me under her wing and began introducing me to the art of teaching in higher education. This woman is a true trail blazer in healthcare education. She has set CCHS apart by bringing courses like Infant Massage, Yoga Teacher Certification, Healing Touch, and Aroma Therapy onboard as part of their interdisciplinary health studies. I decided to bounce the idea of a mindfulness for self-care course off Nancy, truly just as a suggestion to further expand CCHS's integrative health offerings. She loved the idea and immediately put me in front of the Provost and other faculty to present the concept. They were intrigued and began exploring how such a course might fit into the current offerings; and three months later, gave me the go ahead to design

and teach the three-semester hour credit course. I suggested adding the research aspect of the course as a tool for measuring its effectiveness, telling others what CCHS is doing in integrative health, and providing the students at CCHS the opportunity to participate in research; and hence, the establishment of my thesis project.

### **Positionality**

My role as course designer, instructor, and researcher is important to this project. My training and 27 years of experience as a registered and licensed Occupational Therapist (OTR/L) ensure that I have professional level understanding of both physical and cognitive development and normal function in humans, expertise in creating therapeutic activities and instructing others in their use, understanding of physical and behavioral health disorders, and competency in facilitating groups focused on exploring and developing skills toward enhancing, "... social interaction, self-regulation, goal setting, and positive choice making" (AOTA, 2014, p. S31). My training and nine years of experience as a registered Yoga Teacher (RYT-200) ensures that I have knowledge of the history and precepts of yoga, skill in safely demonstrating and instructing yoga asanas, understanding of the meditative and mindful awareness aspects of yoga, and ability to manage an exercise class environment. My academic performance in classes toward earning a Master's degree in Adult and Community College Education confirms that I have a solid grasp on the theories and teaching strategies used with this population. My daily mindful yoga practice sustained over the past several years provides me with a deeply personal and embodied knowledge of mindfulness, whereas having direct experience as a participant in a community-based MBSR course allows me to understand the original parent format of mindfulness-based programs (MBP) as defined by Crane, et al. (2016). Finally, my role as an adjunct faculty member at the host site of the

study ensures my familiarity with the facility and the learning management system (CANVAS), gives me insight into the day to day operations that students experience, and allows me to foster and maintain working relationships with other faculty and staff.

The process of this project has been both a trail full of obstacles navigated by passion, determination, and often morbid curiosity; and at the same time a joyful experience that feels almost like destiny as each piece continues to land in the place where it is best suited. I am intimately familiar with the process from inception to fruition, understand the importance of making sure all policies, procedures, and legal guidelines are followed, recognize the value of professional and personal contributions made by others, and respect the two institutions of higher learning that support my endeavor. Additionally, I have received no monetary or other compensation for my time or knowledge in developing IHS 350 Mindfulness for Self-Care or for teaching the semester long course and carrying out the research. This is intentional so as not to give the impression of bias or influence. This positionality has allowed me to make appropriate adjustments to the course while teaching it and view the findings under the light of objectivity and through the lens of gratitude.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **Purpose and Criteria for Inclusion**

There currently does not exist a gold standard format for offering mindfulness training to healthcare students. The purpose of this literature review is two-fold: 1) to explore the specific details of how mindfulness has and is currently being taught to healthcare students; and 2) to seek to understand how the various components and formats are positively impacting student lives.

In searching for relevant articles, the words “mindfulness”, “training”, “healthcare”, and “students” were used in different combinations. Additionally, searches were performed using specific disciplines such as Occupational Therapy, Nursing, Physical Therapy, and Physician Assistant in attempt to find studies carried out on students from multiple disciplines. Lastly, reference lists from articles describing mindfulness training to healthcare professionals were utilized to ensure coverage of the full scope of available relevant research on students.

Studies that focused primarily on teaching mindfulness to students as an intervention for patients were eliminated, as this current inquiry is directed specifically toward the personal impact such a course has on students and using mindfulness as an intervention tool may not fall within the scope of practice of many disciplines, thus limiting the value of such information. Studies that focused on a single technique of mindfulness such as breathing without meditation were also eliminated as this approach is far outside of the recommended content for Mindfulness-Based Programs (MBPs) as defined in Crane, et al. (2016), and would offer little value toward understanding its complimentary role with other techniques

and content. Studies that failed to describe the details of the course at least in part were eliminated because there would be no way of knowing which components were included toward the hypothesized or reported outcomes. Articles that focused on non-healthcare students were also eliminated for the purposes of addressing the unique needs associated with clinician training. Lastly, articles older than 2007 were eliminated simply because studies beyond the past decade are sparse and lack the benefit of western society's increased understanding and acceptance of mindfulness that time and exposure have provided.

Twenty-seven articles were chosen for inclusion representing 28 different course designs. Two of the articles evaluate the same course presented to social work students, but report outcomes from two different time offerings (Chrisman, Christopher, & Lichtenstein, 2009; Schure, et al., 2008). Three articles describe the same mini-mindfulness course, "Mindful-Gym", but report three different offerings representing three different formats of the course (Keng, Phang, & Oei, 2015; Phang, Keng, & Ciang, 2014; Phang, Mukhtar, Ibrahim, Keng, & Sidik, 2015). One work describes the format and content of two different courses (Kreitzer & Klatt, 2017); while two papers describe course format and content in detail, but only generally imply outcomes (Gockel, 2015; Kreizer & Klatt, 2017). These were included because of the value they add in descriptive course design. None of the articles fully described every detail of the course design, thus making it difficult to thoroughly compare one to another.

### **Methodologies, Population, and Research Questions**

Although this chapter is intended and will be a review of the current related literature, it is important to take a more detailed, almost meta-analysis approach when examining the methodologies, student populations, and research questions to demonstrate the wide range of

reporting and establish the need for a more student-centered transformative educational experience.

### **Methodologies**

Of the 28 courses reviewed, 15 reported quantitative findings, seven reported qualitative findings, four shared their results through both quantitative and qualitative measures, and two reported more theoretical implications versus actual results. There has been both praise and criticism for these methodologies in mindfulness research. On the one hand, a qualitative design allows students to fully express their experience through open-ended written or interview questions, thus allowing the researcher to grasp the subtle nuances of individual experiences and the common experience of the collective group (Schure, et al., 2008; White, 2013). On the other hand, stand-alone qualitative studies carried out on mindfulness often lack reliability because they are not being reproduced in other settings or followed up with quantitative measures to confirm or study identified themes (Schure, et al., 2008). In a concept analysis of bringing mindfulness training to nurses that referenced both student and professional education, White (2013) writes that in contrast to the quantitative design most frequently used with this topic, a qualitative design is better suited to the “experiential and subjective nature of mindfulness” (p. 290).

A common criticism of the type of quantitative designs in mindfulness research is the lack of objectively measurable results versus self-reported changes found in pre- and post-intervention questionnaires. Schure, et al. (2008) and Martin-Asuero and Garcia-Banda (2010) suggest including physical measures such as salivary cortisol, blood pressure, and pulse rate to address this problem. Although speaking specifically about measuring the efficacy of mindfulness interventions in rehabilitation patients, Hardison and Roll (2016)

identify three substantial limits of current quantitative studies: the studies report Level III evidence versus the results of randomized controlled trials with adequate effect sizes; the broad variation in the scope and content of the intervention tool makes identifying consistent outcomes nearly impossible; and the participant pool does not adequately represent members of both sexes. These same limitations can be found in the majority of studies focused on bringing mindfulness education to healthcare students.

White (2013) reiterates what others have noted in quantitative studies: there is a lack of statistical power, and bias created by participant self-selection is the norm. At the same time, White (2013) suggests that student interest and commitment are also key ingredients to learning and factors that should be considered when developing courses and research projects. The same positive bias created by self-selection in Solhaug, et al.'s (2016) study of medical and psychology students is believed to be nullified by the authors' intentional seeking of both positive and negative feedback.

Regarding gender, in their randomized controlled trial of how mindfulness training effects stress management in volunteer medical and psychology students, deVibe, et al. (2013) found female participants experienced greater changes from the course, but males were underrepresented in the intervention group. Solhaug, et al. (2016) and Halland, et al. (2015) also reported lower numbers of male participants compared to female volunteers. Larger and more gender balanced groups can open the door for research that may influence the way mindfulness is taught to males and females. In exploring the benefits and challenges of offering mindfulness training to medical and psychology students, Solhaug, et al. (2016) surmise that the multi-faceted nature of mindfulness requires the utilization of mixed methods research to better understand the factors contributing to student outcomes.

## **Student Populations**

The number of studies carried out specifically on medical students doubles those on any single allied health discipline but are similar in numbers to those performed on multi-disciplined participant groups. The individual discipline breakdown of the 28 courses examined is as follows: medical student and/or resident (seven), psychology students (three), nursing students (three), social work (SW) students (three), counselling students (two), and occupational therapy (OT) students (one). Three courses sought to understand the experience of medical and psychology students; while six courses measured outcomes of participants from three or more disciplines including podiatry, OT, physical therapy, nursing, medicine, nurse practitioner, SW, psychology, counselling, nutrition, and pre-med studies. Twenty-one of the courses were designed for graduate (master and/or doctorate) level students, three for bachelor level, four for both bachelor and graduate (master and/or doctorate) level, and none for associate degree students. The few or absent studies interested in bachelor and associate degree students is a definite gap in the literature which contributes to the limited understanding of how a course might be delivered to multiple levels across multiple disciplines.

## **Research Questions**

**Quantitative.** There is a wide range of research interests in the quantitative studies evaluated, with 100% of them relying upon self-reported measurement tools such as questionnaires to assess changes from pre-course to post-course. Although most of the questionnaires used are valid tools of measurement, for some outcomes different tools were used across the studies, again making it difficult to compare apples to apples. Including a list

of the hypothesized outcomes and the different tools used to measure them is important to establish the need for a more simplistic and unified approach to this educational endeavor.

***Perceived stress.*** Fourteen courses measured perceived stress (Bond, et al., 2013; Bonifas & Napoli, 2014; Cohen & Miller, 2009; deVibe, et al., 2013; Erogul, Singer, McIntyre, & Stefanov, 2014; Finkelstein, Brownstein, Scott, & Yu-Ling, 2007; Kemper, Lynn, & Mahan, 2015; Keng, Phang, & Oei, 2015; Kreitzer & Klatt, 2017; Moore, 2008; Newsome, et al., 2012; Phang, et al., 2015; Spadaro & Hunker, 2016; Warnecke, Quinn, Ogden, Towle, & Nelson, 2011). Perceived stress was consistently evaluated using one of three scales. The Perceived Stress Scale (PSS) was used in 10 studies, the PSS-14 (short form) was used in one study and the Perceived Medical School Stress Scale (PMSS) was used in two works. Kreitzer & Klatt (2017) did not identify the scale used.

***Mindfulness.*** Nine studies evaluated the change in mindfulness from pre-to post course (Cohen & Miller, 2009; deVibe, et al., 2013; Kemper, et al., 2015; Keng, et al., 2015; Moore, 2008; Newsome, et al., 2012; Niessen & Jacobs, 2015; Phang, et al., 2015; Sanko, McKay, & Rogers, 2016). Six different mindfulness questionnaires were utilized across the nine studies to evaluate pre- and post-course mindfulness. The Mindful Attention Awareness Scale (MAAS) was used in four studies, the Five-Facet Mindfulness Questionnaire (FFMQ) was used in one study, the FFMQ short form in one study, the Freiburg Mindfulness Inventory (FMI) in one, the Kentucky Inventory of Mindfulness Skills (KIMS) in one, and the Cognitive and Affective Mindfulness Scale-Revised (CAMS-R) in one study.

***Self-compassion.*** Five courses measured self-compassion before the course and compared it to the level following the course (Bond, et al., 2013; Erogul, et al., 2014; Kemper, et al., 2015; Newsome et al., 2012; Niessen & Jacobs, 2015). The Self-Compassion

Scale developed by Neff was used in four of the studies assessing self-compassion quantitatively, while the short form of this same scale was used in the remaining work.

***Depression, Anxiety, & Stress.*** Four courses were interested in student depression, anxiety, and stress as measured in a single tool (Keng, et al., 2015; Phang, et al., 2015; Spadaro & Hunker, 2016; Warnecke, et al., 2011). Two authors utilized the Depression, Anxiety, and Stress Scale (DASS), one the shortened DASS-21, and one the Hospital Anxiety and Depression Scale (HADS).

***Empathy.*** Four researchers assessed student levels of empathy before and after the course (Barbosa, et al., 2013; Bond, et al., 2013; Kemper et al., 2015; Kreitzer & Kratt, 2017). Two researchers depended on the Jefferson Scale of Physician Empathy (JSPE) to measure this outcome, one used the Empathetic Concern Scale (ECS), and one did not report the name of the tool (Kreitzer & Klatt, 2017).

***Anxiety.*** Three authors were interested in student anxiety (Barbosa, et al., 2013; Cohen & Miller, 2009; Finkelstein, et al., 2007). All three of these studies used a different tool to measure anxiety including the Beck Anxiety Inventory, the Burns Anxiety Inventory, and the SCL-90 Anxiety Subscale.

***Burnout, compassion, depression, general health, resilience, satisfaction with life, and quality of life.*** Two studies were interested in each of the following measures: burnout (Barbosa, et al., 2013; deVibe, et al., 2013); compassion (Kemper, et al., 2015; Moore, 2008); depression (Cohen & Miller, 2009; Finkelstein, et al., 2007); general health (deVibe, et al., 2013; Keng, et al., 2015); resilience (Erogul, et al., 2014; Kemper, et al., 2015); satisfaction with life (Cohen & Miller, 2009; Keng, et al., 2015); and quality of life (Bonifas & Napoli, 2014; Sanko, et al., 2016). In the case of two studies evaluating the same

outcome, the norm was the use of different tools. However, burnout and general health were assessed using the same tool for each.

**Other outcomes.** Single studies were uniquely interested in the following outcomes: attention network (Spadaro & Hunker, 2016); basic character (neuroticism) (Halland, et al., 2015); confidence in providing calm and competent care (Kemper, et al., 2015); core spiritual experience (Jain, et al., 2007); daily emotion (Jain, et al., 2007); emotional intelligence (Cohen & Miller, 2009); ethical decision making (Sanko, et al., 2016); healthcare quality improvements (Sanko, et al., 2016); meaning in life (Cohen & Miller, 2009); negative affect (Kreitzer & Klatt, 2017); positive affect (Kreitzer & Klatt, 2017); positive states of mind (Jain, et al., 2007); profile of mood (Finkelstein, et al., 2007); psychological distress (Jain, et al., 2007); self-efficacy (Phang, et al., 2015); self-regulation (Bond, et al., 2013); social connectedness (Cohen & Miller, 2009); socially desirable responding (Jain, et al., 2007); subjective happiness (Keng, et al., 2015); subjective well-being (deVibe, et al., 2013); and ways of coping (Halland, et al., 2015).

**Qualitative.** The research questions guiding the qualitative studies were by nature, more open ended and were asked through written journal assignments, longer written essays and papers, written testimonials, group stream of consciousness writing, facilitator notes of group discussions, interviews, and prompted feedback questionnaires. Across the 10 qualitative results, research questions fall into five general categories: 1) how mindfulness impacts student daily life (Bond, et al., 2013; Dorian & Killebrew, 2014; Moore, 2008; Newsome, et al., 2012; Schure, et al., 2008; Solhaug, et al., 2016; Stew, 2011); 2) how students experience and understand mindfulness (Dorian & Killebrew, 2014; Newsome, et al., 2012; Niessen & Jacobs, 2015; Solhaug, et al., 2016); 3) how mindfulness effects student

ability to cope and manage stress (Birnbaum, 2008; Bond, et al., 2013; Stew, 2011); 4) how students apply or plan to integrate mindfulness into their professional lives (Dorian & Killebrew, 2014; Moore, 2008; Niessen & Jacobs, 2015; Schure, et al., 2008; Solhaug, et al., 2016; Stew, 2011); and 5) how students learn mindfulness, how the level of engagement impacts learning, and which practices are most meaningful toward learning (Dorian & Killebrew, 2016; Schure, et al., 2008; Solhaug, et al., 2016). Additionally, Stew (2011) sought to understand if mindfulness impacts student learning and academic performance, and Moore (2008) asked students to provide feedback on the course itself.

### **Need for a Different Approach**

A review of the quantitative literature suggests the desire to understand and measure how mindfulness effects healthcare students has perhaps become collectively too broad and individually too eclectic with authors honing on very specific and unique outcomes that make little contribution to the body of knowledge. A plus is the consistency with which perceived stress and mindfulness are being evaluated across many disciplines and levels of education. The use of a common tool for perceived stress is allowing replication of the findings, which strengthens the belief that mindfulness education does indeed positively impact student stress. Mindfulness is being assessed by different tools, but they have good internal consistency and are highly correlated (Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006). Outcomes in mindfulness using multiple tools are consistently reaching statistical significance, further validating the suggestion that mindfulness education does increase mindfulness.

Neff's questionnaire is being utilized 100% of the time, but self-compassion is being assessed in less than 1/5 of the studies. Other measures are being evaluated in less than 1/6

of the studies and by various tools; and many outcomes are only being explored by a single author. Another issue is the number of surveys and questionnaires students are being asked to complete before, during, and after they have participated in a course. Several studies utilized between six and eight questionnaires at two to four different time intervals. Many utilized three to five survey-oriented tools at multiple times. Such subjective responses can be greatly influenced by time of day and student response to the day's events (Spadaro & Hunker, 2016). Additionally, such a high volume can create survey fatigue in already emotionally and physically exhausted participants.

The qualitative research questions allowed students the freedom to describe their experiences in as much or little detail as they wanted. As a reader and researcher, such responses shed far more light on how mindfulness affects students than do the self-reported before and after measurements of psychological functioning assessed quantitatively. Care does, however need to be taken that the questions do not lead the student into discussing particular outcomes such as stress, anxiety, or academic performance. A move toward collectively narrowing and simplifying the scope of inquiry seems necessary at this point to effectively evaluate how best to introduce healthcare students to the practice of mindfulness.

The first priority should be assessing if a course is providing students with the opportunity to explore, experience, and understand mindfulness as both a systematic practice and an embodied way of knowing, that it may permeate their daily lives, reactions, and choices. In contrast to the heavily stressed scientific approach to healthcare, White (2013) believes deliberate mindfulness education can help students, "...develop a particular way of being present for themselves and others, and can create a shift from a purely theoretical way of knowing to one that is more embodied and holistic" (p. 291). Considering self-care is the

most identified preventer and mediator of burnout, the second priority must be determining if a course is encouraging students to evaluate their current level of self-care and providing them with the knowledge and tools to continually assess and strengthen this area of their personal and professional lives. Gockel (2015) is convinced that. "...anchoring self-care to clinical practice at the earliest stages of professional development" is vital toward developing healthy clinicians who can effectively cope with the unique stressors associated with caring for others (p. 688).

As discussed earlier, self-care has high correlations to mindfulness, self-compassion, self-regulation, and self-awareness. Building these concepts and some of the other outcomes found in the 28 studies into the actual course content makes far more sense than trying to measure each one individually with inadequate sample sizes and a wide range of tools. This can be best illustrated using the precepts and attitudes of mindfulness. Mindfulness is a practice that through practice becomes a way of life, a way of viewing self and the world that then encourages deeper practice. The circle of exploration is unique to each person. Measuring specific pieces and parcels such as anxiety, ethical decision making, or capacity for delivering calm and competent care, while trying to allow students to experience mindfulness, is an example of striving. Not only do specified outcomes create a disconnect between the intention of exploration and the goal of enhancing well-being, it can greatly impede a student's capacity to objectively complete the self-scoring questionnaires. A combination of one broad spectrum pre- and post- course mindfulness questionnaire, a private self-care exploration tool, and narrative reflections midway and at the end of the course may be a more appropriate level and balance of inquiry.

## Course Content

Before examining the literature on course content specific to students, it is important to first discuss the opinion and recommendations of the founder and primary stakeholders of the original MBSR program as it continues to be the most researched and most successful formal mindfulness education program available.

### **The Essentials of Mindfulness-Based Programs**

In 2016, Crane, et al. published an editorial to discuss and, “...define the essential characteristics of the family of mindfulness-based programs (MBPs) originating from the parent program MBSR, and the processes which inform adaptations of MBPs for different populations or contexts” (Crane, et al., 2016, p. 990). The authors describe MBSR and Mindfulness-Based Cognitive Therapy (MBCT) as first-generation MBPs and use the textile terms “warp” and “weft” to illustrate the established and constant foundational components of MBPs (warp) and the unique modifications that may be made to make the program more appropriate or accessible to various groups of people (weft) (Crane, et al., 2016). Offerings that fall outside of these prescribed standards are considered “mindfulness-informed” and include but are not limited to: Acceptance and Commitment Therapy, Compassion Focused Therapy, Dialectical Behavioral Therapy, Mindful Self Compassion, and Positive Psychology (Crane, et al., 2016). Coinciding with Crane, et al.’s (2016) editorial, The Center for Mindfulness in Medicine, Health, and Society made the decision to open-source the Authorized MBSR Curriculum in an effort to encourage the sharing of knowledge, provide clarity, and promote informed and rigorous research (UMASSMed, 2017b). The center’s preference is that only teachers certified through the MBSR teacher training program use the manual for teaching. All others may use it toward research and greater understanding

(UMASSMed, 2017b). To be considered an MBP, courses must include the following essentials:

1) is informed by theories and practices that draw from a confluence of contemplative traditions, science, and the major disciplines of medicine, psychology and education; 2) is underpinned by a model of human experience which addresses the cause of human distress and the pathways to relieving it; 3) develops a new relationship with experience characterized by present moment focus, decentering and an approach orientation; 4) supports the development of greater attentional, emotional and behavioral self-regulation, as well as positive qualities such as compassion, wisdom, equanimity; 5) engages the participant in a sustained intensive training in mindfulness meditation practice, in an experiential inquiry-based learning process and in exercises to develop insight and understanding” (Crane, et al., 2016, p. 993).

Based on the above criteria, many of the courses being taught to healthcare students qualify as MBPs and they offer creative ways of offering certain elements to better meet student and individual curricular needs. Additionally, several courses cannot be considered true mindfulness-based programs because they lack the full scope of content. This does not mean that parts of their content, format, and research questions cannot be meaningfully applied toward the development of a true MBP. The following discussion will highlight creative additions and alternatives, in reference to required MBP components, that bring value to students and contribute to positive outcomes.

### **Informed by Tradition, Science, Medicine, Psychology, and Education**

Of the courses reviewed, a few maintained the original MBSR lecture content, but several creatively expanded the didactic portion to include scholarly readings and assignments toward helping students understand the science, psychology, and theories of learning that support the practice of mindfulness as well as topics pertinent to their field of study. In “Mind-Body Medicine: An Experiential Elective” for medical and nursing students, Finkelstein, et al. (2007) opened each week’s session with a 30-minute large group lecture highlighting topics such as the stress response, meditation, imagery, exercise, nutrition, genograms, and spirituality. Weekly readings from the fields of psychological and medical anthropology, behavioral medicine, religious studies, cross-cultural psychology, and psychiatry and related research assignments contributed to the didactic portion of counselling students’ “Mind/Body Medicine & the Art of Self-Care course (Schure, et al., 2008). These same students reported feeling their perspective on beliefs and value systems had broadened, which the authors contribute to exposure to the additional readings (Schure, et al., 2008). Medical students taking Bond, et al.’s (2013) “Embodied Health” course read weekly research articles before class on topics relevant to mindfulness and the practice of medicine, topics such as effects of slow breathing on physiology, resistance breathing, yoga and neurotransmitters, the relaxation response, low back pain, PTSD, chronic pain, and the placebo effect. Students praised the pairing of scientific readings with mindfulness practice, saying it helped them make meaning of the concepts they were learning (Bond, et al., 2013). Bond, et al. (2013) believe this type of knowledge, which is typically beyond the scope of traditional medical school curriculum, is valuable for physicians toward better understanding the mind-body connection. Master of social work students benefited from weekly themed

lectures based on quality of life topics, which guided that week's meditations and experiential assignments (Bonifas & Napoli, 2014).

### **Addresses the Impact of Stress on the Human Experience**

The majority of courses reviewed addressed stress in one way or another. This makes sense as mismanaged stress greatly contributes to burnout and MBSR is centered around reducing stress. The programs that stayed true to MBSR addressed stress management through didactic lectures, formal mindfulness meditation, homework reflection assignments, and group discussion. In addition to these mediums, other courses wove the topic into existing discipline curricula, extended the list of standard MBSR formal practices, taught creative and brief stress reducing exercises, and encouraged journaling.

**Additional formal practice options.** Gockel (2015) paired specialized meditations such as Jon Kabat-Zinn's mountain meditation and Gehart and McCollum's lifecycle meditation with clinical skill development to help social work students visualize the process of coping with change, managing external stressors, and adjusting to the aging process, a knowledge that can translate into their ability to help future clients do the same. Chrisman, et al. (2009) incorporated the ancient Chinese practice of *qigong* into a program for counselling students. Over the 15-week course, participants practiced the Eight Brocades of qigong for the first 15 minutes of each class meeting and had the option to use qigong as part of their required daily formal practice outside of class (Chrisman, et al., 2009). Students contributed their sense of calmness, reduced feelings of stress and pressure, and reduced performance anxiety to the qigong practice (Chrisman, et al., 2009).

**Mini-mindfulness moment options.** Through the "Mindful-Gym" program, medical students were encouraged to use the Mindful-S.T.O.P. exercise, a 1-minute, 4-step

meditation that can be used any time of day in any place to re-center, reduce stress, and be present (Keng, et. al., 2015; Phang, et al., 2014; Phang, et al., 2015). The acronym S.T.O.P stands for stop, take deep and mindful breaths, observe the present moment, and proceed with a smile, offering busy medical students an easily remembered tool that can be implemented with greater ease than traditional 45-minute MBSR meditations (Phang, et al., 2014).

Gockel (2015) inserted 10-minutes of formal mindfulness training and five minutes of debriefing into an existing social work clinical skills course and then encouraged students to practice the mindfulness concept informally for the duration of the class. The author believes this brief type of training that is repeated in different contexts within the course, encourages, "...attention, cognitive flexibility, affect tolerance, and empathy", and offers an avenue for practicing self-regulation and self-care skills (Gockel, 2008, p. 683).

Moore (2008) offered clinical psychology students 10-minute mindfulness experiences three times per week over four weeks to determine if this compressed dosage of MBSR concepts could produce increased mindfulness and increased self-kindness. The students did demonstrate an increase in mindfulness but did not experience a statistically significant change in self-kindness (Moore, 2008). These findings should not be thrown out with the bath water, as when viewed in light of narrative reflections indicating the students' desire to have a group discussion time, they can significantly inform future course design. The results indicate brief 10-minute meditations are effective toward enhancing student understanding and practice of mindfulness, and the group process is an important component of the total course that should not be overlooked for the sake of time. Another potentially

valuable piece of information is the absence of a journaling component for students in the Moore (2008) offering.

Warnecke, et al. (2011) carried out an eight-week randomized controlled trial to determine if listening to a daily 30-minute meditation CD would affect stress and anxiety levels in medical students. Despite the lack of didactic education, experiential exercises, a group process, and encouragement of informal practice, the students did indeed realize a statistically significant reduction in both perceived stress and anxiety. No other outcomes of mindfulness were measured making it is impossible to speculate any potential effect, but it is meaningful that daily meditation alone positively influenced stress and anxiety.

**Journal writing.** Both individual and group journaling proved to be an effective tool for managing stress in students. Undergraduate social work students in Birnbaum (2008) discovered a safe “accompanying place” in their weekly mindfulness course meeting. The faculty facilitator encouraged group stream-of-consciousness writing which allowed participants to reflect together on challenges, questions, insights, and internal changes (Birnbaum, 2008). Although it is impossible to discern exactly which components facilitate a reduction in stress, an anecdotal observation may contribute to future understanding.

Of the 28 courses reviewed, eight encouraged individual reflective journaling, one through an online forum. In all but one of these studies, a statistically significant reduction in perceived stress (Cohen & Miller, 2009; Kreitzer & Klatt, 2017; Spadaro & Hunker, 2016) or a narratively reported increased ability to cope with stress or manage anxiety (Chrisman, et al., 2009; Dorian & Killebrew, 2014; Schure, et al., 2008; Stew, 2011) was found. It could be coincidental or may be credited to the fact that all these courses also included a group process; or it could indicate the important role reflective journaling plays for students.

Also, of interest, the outlier, Bonifas & Napoli (2014) had added academic rigor by requiring students to critique 17 peer-reviewed articles and contribute to a fast fact group research presentation that demanded the reading of 12-25 additional scholarly works. Again, this is a purely anecdotal observation, but may be pertinent when selecting academic assignments. At what threshold does the stress of additional academic work begin to undo the positive effect of stress reduction that mindfulness courses historically offer? Dorian & Killebrew (2014) recognize that journal assignments read by the instructor may cause students to feel pressure to exaggerate or falsify their experience to please the teacher or to positively affect their grade. This is a very noteworthy insight. Perhaps a private journal assignment with just a visual check-off for completion would encourage more honest and meaningful reflection.

### **Guides Students Toward Developing a New Relationship with Experience**

Through formal meditation, informal mindfulness practice, in-class activities, brief homework reflection assignments, and group discussion, MBSR guides students in attending to thoughts and feelings toward recognizing their transient nature, being present in every moment, and developing the capacity for viewing thoughts and feelings through a more reality-based lens (Crain, et al., 2016). As expected, programs that stayed true to the MBSR format accomplished this, but some other courses offered additional avenues to incorporate this important aspect and realized similar benefits despite format modifications.

In their 10-week offering, which produced statistically significant reductions in perceived stress and anxiety, Finkelstein, et al. (2007) added small group experiences such as mindful eating and drawing self-portraits to their weekly meetings allowing students the opportunity to practice being present and explore the relationship they have with their

thoughts and feelings. Mindfully eating helps train a person to experience each sensation and thought as it is occurring versus rushing through a meal on auto-pilot. Drawing self-portraits allows students to explore their perceptions and bias toward their bodies and may help them understand how thoughts and feelings can inform attitudes and beliefs, which then impact self-care and relationships with self and others.

Graduate psychology students participated in creative group movement exercises that focused on body awareness in different contexts, listening activities that challenged their ability to attend and manage multiple audible inputs, and movement activities that helped students explore how meditation may impact embodied knowledge and therefore bodily experience (Cohen & Miller, 2009). Students in this six-week course experienced reduced perceived stress, reduced anxiety, increased mindfulness, improved emotional intelligence, improved social connectedness, and a trend away from stressfully searching for meaning in life, which the authors believe may be correlated to a greater sense of acceptance (Coen & Miller, 2009).

Master social work students explored how just a quick mindful breath cue during a role-playing exercise could bring their attention back to the present moment and help them acknowledge how present thoughts and feelings effected their interactions (Gockel, 2015). The author believes such experiences can help students develop a capacity to address the needs of their future clients more holistically versus as individual problems (Gockel, 2015).

In three of its four weeks, the Mindful-Gym program emphasizes present moment awareness and acknowledgment of thinking errors and provides students the opportunity to practice interpreting their thoughts in more realistic ways (Keng, et al., 2015). Medical students who participated in Keng, et al.'s (2015) Mindful-Gym course demonstrated

statistically significant improvements in mindfulness, subjective happiness, satisfaction with life, perceived stress, anxiety, depressive symptoms, and general psychiatric symptoms.

Given the short duration of the course, the heavy emphasis on present awareness and relationship with thoughts and feelings, and the overall positive outcomes, it appears that this component of mindfulness education is important to its success.

Jain, et al. (2007) reduced the length of the program to four weeks with 90-minute weekly meetings while leaving the rest of the MBSR based program intact. Students experienced a significant reduction in rumination and distraction which the authors contribute to enhanced attention and appraisal of thoughts and feelings (Jain, et al., 2007). Again, although an observation, the amount of time spent with the essential components may not need to fit into a prescribed dosage as each aspect of mindfulness may be heavily mediated by others.

### **Supports the Development of Self-Regulation and Other Positive Qualities**

MBPs should, "...cultivate an internal climate of friendliness towards experience – whether it be pleasant or unpleasant...that supports the development of compassion and wisdom" (Crane, et al., 2016, p. 994). Several courses reviewed demonstrate that this component can be effectively addressed through different schedules and with additional content.

**Self-regulation.** In their 15-week, graded three-credit elective course for counseling students, Schure, et al. (2008) found meditation practice helpful toward students developing attention, emotion, and behavior regulation. Meditation is common to all MBPs, but this program offers an example that the same desired outcome can be achieved through a course that has been nearly doubled in length, split into two sessions per week, has added journaling,

has slightly reduced the home formal meditation practice, and has added related readings and a research assignment.

Stew (2017) introduced OT students to a four-week mindfulness program that met for 90 minutes per week and utilized only body scan, mindfulness meditation, a three-minute mini meditation, and informal mindfulness practice. These changes reflect a 50% reduction to the original MBSR program in length, weekly meeting time, and number of meditations taught. Students, however, still experienced positive changes in their ability to regulate emotion in the face of frustrating and stressful situations, and cope with discomfort by turning into the pain versus trying to escape or avoid it (Stew, 2017).

Undergraduate social work students expressed an improved capacity for containing and regulating emotions such as fear, after their eight-week, heavily group process focused mindfulness program (Birnbaum, 2008). The course did not include didactic instruction beyond the facilitator reading passages from Jon Kabat-Zinn's book, Wherever You Go, There You Are: Mindfulness Meditation in Everyday Life; nor did it incorporate homework assignments or daily individual formal and informal practice outside of the weekly group meeting (Birnbaum, 2008). The author notes that the emotion-based nature of this group is atypical in mindfulness education and suggests that while it may have fostered a deeper connectedness and openness to internal possibilities that could later translate into a more "egalitarian conceptualization of the therapeutic relationship", it also serves as a reminder of the importance of professional boundaries between faculty and student, and therapist and client (Birnbuam, 2008, p. 849). This course structure and outcome may imply that the group process significantly contributes to the development of self-regulation.

**Other positive qualities.** Several course designers expanded the formal meditative practices to include self-compassion and loving-kindness meditations toward enhancing a positive relationship between student and self, and student and others. Keng, et al. (2015) and Phang, et al. (2014) dedicated one of the four weeks of Mindful-Gym to kindness meditation and one to workouts of gratitude. In a later offering of Mindful-Gym, Phang, et al. (2015) added a fifth week that focused on heartfulness or cultivating loving-kindness. Gockel (2015) believes by repeatedly practicing loving-kindness meditation, social work students gain, "...insight into the common struggles and aspirations we all share" and develop greater empathy and compassion toward others (p. 687). Stew (2011) concurs with his experience with loving-kindness meditation and OT students. When reflecting on their qigong experience in Chrisman, et al. (2009), counselling students expressed an appreciation for group awareness and shared energy that came from this formal meditative practice. Similarly, through weekly yoga asanas, medical students in Bond, et al. (2014) became more aware of their highly competitive natures and tendencies to harshly judge themselves and others, leading them to greater acceptance, self-compassion, and a new sense of community.

### **Encourages Insight and Understanding Through Sustained Intensive Practice**

**Formal & informal practice.** The original MBSR program includes formal meditation in every class and encourages 45 minutes of formal and 15-20 minutes of informal practice six days per week. These suggestions cannot be the only acceptable dose of "intensive" practice or Crain, et al. (2016) would not make room for changes to program structure, length, and delivery format toward meeting the needs of the population being served. Every program evaluated included some opportunity for formal meditation and most, informal meditation as well. Other than the handful of courses that stayed 100% true to the

MBSR format, they all implemented a different dosage of formal and informal meditation ranging from in-class only to a combination of in-class and home practice. The collective whole agrees that for healthcare students, the practice requirement is vital, but should be lessened to encourage participation, reduce drop-out, and reflect Goldberg, et al.'s (2014) recent finding in clients utilizing mindfulness toward smoking cessation, that quantity of time may not be nearly as valuable as the quality of the meditation. The specifics of format changes will be discussed in more detail in the next section.

**Insight and understanding through experience and group process.** Providing participants with the opportunity to try-out the concepts of mindfulness in every-day life and discuss these experiences with others is crucial to their understanding of the practice (Crane, et al., 2016). The individual authors of the courses examined recognize the value of both experiential learning and the group process, as 25 of the 28 programs included in-class and assigned homework activities and 24 of the 28 programs included a weekly group meeting time for sharing insights, asking questions, and collectively reflecting. As discussed earlier, many of the programs utilized highly creative activities involving art, music, and movement to encourage student understanding and integration of mindfulness. Newsome, et al. (2012) believes the group component facilitates a change in perspective in students that fosters a continued transformation long after the course has ended.

Regarding transformation, Solhaug, et al. (2016) found students' interpretation and intention toward the practice of mindfulness influenced their level of engagement and degree of benefit. They noted, "The understanding ranged from 'instrumental' to more 'comprehensive' positions, and correspondingly, the process of engagement varied from reaching a specific state of mind to broadening the perspective in relation to self and others"

(Solhaug, et al., 2016, p. 846). These authors believe that course leaders should be intentional about frequently asking students to reflect on their intentions, attitudes, and interpretations of mindfulness to offer them new paths toward understanding the relationship between the process and outcome aspects of the practice (Solhaug, et al., 2016). This concept of mindfulness landing on students in very individual ways and through different degrees of readiness can be applied to the practical act of self-care. Chrisman, et al. (2009) suggest introducing students to an array of activities and forms of self-care that they may discover and continue exploring how the various practices positively impact their daily lives.

### **Course Format**

#### **Requirement, Credit, and Grades**

Should an introductory mindfulness course be offered as a mandatory credited course, an elective course with credit, an adjunctive learning experience rewarded with a gift or payment, or a voluntary extra-curricular activity toward earning community service hours? The current literature responds with...all of the above. Of the 28 courses examined, only one course was mandatory; 10 gave semester hour credit as either part of another graded elective course, as a stand-alone graded elective, or as a stand-alone ungraded elective; seven courses offered no grade or credit, but instead awarded study participants with financial gifts ranging from \$25.00 to \$75.00 or gifts such as mindfulness books and CDs; and 11 courses did not designate if they awarded credit, but based on the details discussed, it appears unlikely.

At Fontys University of Applied Sciences in the Netherlands, 400 first-year bachelor level nursing students were required to take a four-week intensive training in mindfulness as part of a new offering in person-centered nursing (Niessen & Jacobs, 2014). The hypothesized outcomes of increased mindfulness and self-compassion did not reach

statistical significance and many of the students were resistant to the mandatory nature of the course in the beginning (Niessen & Jacobs, 2014). The authors offer several other factors that may have contributed to student attitude and sub threshold findings, which are unique when compared to the literature: the course was in their words, “intensive”, meeting twice a week for 90 minutes; was debuted with students between the age of 17 and 21 in their first year of nursing school; seemed too high level for the students; did not have full faculty understanding or support; and was led by experienced mindfulness teachers who had no training in the developmental needs of adolescents (Niessen & Jacobs, 2014).

It is important to note that Niessen and Jacobs do not state or imply that their course is based on the original MBSR. It appears to have been developed specifically around the theme of person-centered nursing, which may further illuminate the difficulties encountered. Despite the negative features of this experience, most students overcame their initial resistance and narratively reported improvements in self-reflection and self-insight, specifically toward their need for self-care, convincing the authors that mindfulness training has a definite place in nursing education (Niessen & Jacobs, 2014).

In a review of qualitative studies seeking to understand healthcare professionals’ response to mindfulness training, Morgan, Simpson, and Smith (2014) discovered that the impact of such training is strongly influenced by the participants’ reason for taking the course and the depth to which they embrace and integrate the material, leaving the authors to wonder how mandated training might affect outcomes. To date, there are no studies on how healthcare workers respond to required mindfulness training (Morgan, et al., 2014). Warneck, et al. (2011) cites a large survey conducted by Hills, et al. in 2010 that reported medical students are interested in techniques that may help them manage stress and cope with

distress. In Birnbaum (2008), undergraduate social work students initiated the request and helped coordinate their mindfulness course toward experiencing mindfulness meditation, improving self-awareness, and reducing stress. Finkelstein, et al.'s (2007) mindfulness course intended for medical and graduate level nursing students, filled up within three days of opening registration, forcing instructors to turn waiting students away. These facts may indicate that healthcare students at more than one degree level are identifying a personal need for an additional type of training and are recognizing mindfulness as a beneficial tool for managing stress.

Niessen & Jacobs (2014) believe that if only volunteers are invited to participate, other students may never gain exposure to the benefits of mindfulness. In a study of medical students' experience with a modified MBSR course, Erogul, Singer, McIntyre, & Stefanov (2014) go one step further, suggesting that the voluntary nature of participation in most mindfulness courses may overly select students who are interested in mindfulness at the expense of students who may need and stand to benefit from the intervention the most. In a randomized controlled trial, medical and psychology students demonstrated an increased use of problem-solving coping after an MBSR intervention (Halland, et al., 2015). In this same study, researchers discovered that students who exhibited the personality trait, neuroticism and related avoidance-focused coping, experienced the greatest benefit, in that their problem-solving coping increased, their avoidance-focused coping decreased, and their seeking of social support increased (Halland, et al., 2015). This finding is significant in that it infers that a student's personality may impact the nature and degree to which mindfulness training has an impact. It also suggests that the increased awareness that typically comes from mindfulness training, may be beneficial toward helping students recognize a need for social

support, reinforcing Erogul, et al.'s (2014) call to make such training available to students who may not self-select to participate.

In discussing their findings of improved empathy and reduced anxiety in graduate level students from multiple healthcare disciplines, Barbosa, et al. (2013) propose the integration of an MBSR course into required curriculum toward encouraging healthy life habits that can translate into life-long benefits for both clinicians and clients. Stew (2011) agrees, stating, "The inclusion of mindfulness-based training in occupational therapy education is justifiable, given the growing body of evidence in support of the efficacy of mindfulness-based approaches for the health and wellbeing of both the healthcare professionals and those that they serve" (p. 274). Based on the positive impact of their "Quality of Life: Development of Mindfulness" course for graduate level social work students, Bonifas & Napoli (2014) concur that such a course is valuable to students and encourage educators to embrace the opportunity for integrating a mindfulness-based offering into their curriculum. Newsome, et al. (2012) believe their work with undergraduate students planning to major in a variety of healthcare professions, offers, "...compelling evidence for including mindfulness groups as part of the training for students entering helping professions" (p. 309). Cohen & Miller (2009) integrated six weeks of "Interpersonal Mindfulness Training" into an existing graded semester-long psychology graduate course, giving students the option to participate as one way of fulfilling total course requirements. The positive outcomes and high level of attendance led authors to believe that this can be an effective way to teach mindfulness to students training to become psychologists (Cohen & Miller (2009).

One of the primary challenges to offering a mindfulness course is finding space and time for students to participate within curricula already full of required courses and clinical rotations. Offering mindfulness as a credited course capable of filling an elective slot in multiple disciplines may be a benign way to incentivize students to register. It could also provide them valuable exposure in working with participants from other professions and test the waters for moving the course to a mandatory level. Mandated graded courses have the potential to provide much larger sample sizes and greater student commitment, and if diversified across multiple disciplines, may ensure variety in education level and balance in gender, all of which can greatly inform future research endeavors.

### **Length, Time, and Delivery**

In the programs evaluated, the course length, time, and delivery seem directly related to whether the course was offered for credit, the current schedule of students, and the availability of a qualified teacher. Similar to the review of methodologies and populations above, a more detailed examination is necessary here to attempt to understand the impact of format changes.

**Delivery method.** All but five of the programs analyzed were offered in a face-to-face format; two as asynchronous online courses, one as a DVD, one as an audio CD, and one that was somewhat hybrid in that the lecture content was pre-recorded and delivered to students in open groups or as a video download. With the already established fact of limited time and access and the increase in online healthcare education programs, especially in nursing, online mindfulness training may be a real option for many students (Kemper, et al., 2015; Spadaro & Hunker, 2016). According to Kemper, et al. (2015) this is new ground for healthcare students and healthcare professionals alike. Not surprising, the Center for

Mindfulness at UMASS Medical School is now offering an online MBSR program through live scheduled video conferencing (UMASSMed, 2017a); which suggests that the founders and directors of MBSR still believe there is much value in the face-to-face live process.

*Online.* Spadaro & Hunker (2016) were interested in the effect their asynchronous online course would have on perceived stress, mood, and attention in online nursing students. Following the MBSR based 8- week course, stress reduction met statistical significance as did anxiety on the mood scale, but cognitive changes were not substantial (Spadaro & Hunker, 2016). A few consequential findings from this study provide valuable insight that may help future course development. By comparing stress levels at pre-course, course end, and 16 weeks post-course, Spadaro & Hunker (2016) discovered a relationship between the frequency of meditation practice and stress reduction. There was little difference between practicing one time per month and several times per month, but significant difference was appreciated when practice increased to weekly or daily (Spadaro & Hunker, 2016).

The Spadaro & Hunker (2016) course also offers a great example of how a university's learning management system (LMS) can be utilized for course delivery. Students and faculty were already familiar with the system, no additional costs were incurred, and it offered a convenience factor as students were already conditioned to log in several times throughout the day for both academic and community purposes (Spadaro & Hunker, 2016). Additionally, these authors provide key suggestions for faculty toward helping students adjust to the online learning environment. These pointers are equally appropriate for the face-to-face environment: provide an orientation to the course format so every student understands the process even if new to online learning, model healthy behaviors in balancing workload and managing stress, chunk the information in weekly

modules, and encourage students to integrate the mindfulness concepts into their daily lives, modelling this for students (Spadaro & Hunker, 2016).

Kemper, et al. (2015) took a different approach to their online course. Although informed by MBSR, their Mind-Body Skills program only loosely followed its structure. Twelve one-hour modules of approved continuing medical education and audio meditation downloads were made available to pre-med, pre-nursing, and pre-allied health students with no expectation for the number, order, or time frame of completion. This may have been a subthreshold amount of structure, as on average, students only completed three of the 12 modules with two of the modules being commonly completed; introduction to stress, resilience, and the relaxation response, and autogenic training (Kemper, et al., 2015). Despite the low participation rate, students did experience statistically significant changes in perceived stress, self-compassion, and confidence in providing calm compassionate care. Other intended outcomes of empathy, resilience, nor compassion reached this level. It is impossible to speculate how outcomes would have differed with greater participation, exposure to the full scope of modules, and the opportunity for group discussion; but this study provides valuable input for course design: even small amounts of exposure to mindfulness training can have a positive impact on students, a group forum may be important for consistent participation, and faculty expectations may be a predictor of student behavior.

**Hybrid.** Sanko, et al.'s (2016) mindfulness meditation course for nursing students and nursing graduates is not a true hybrid course, but it is similar and provides some valuable insight for course design. The MBSR based course, as identified by the authors, was modified to be specifically relevant to nursing. The didactic portion was pre-recorded and shown during the weekly 60-minute group meeting; students were asked to journal; and

neither home practice or experiential assignments were expectations of the course. Only the post-graduate nurses experienced a statistically significant change in mindfulness over the six-week course; and ethical decision making did not change for either group of students (Sanko, et al., 2016). Participants from both groups did report improvements in quality of life measures such as sleep and stress, and healthcare quality improvements such as clinical performance and empathy (Sanko, et al., 2016). The authors report a high drop-out rate despite the mandate that missing more than two live facilitated sessions would restrict further participation. They attribute this to difficult schedules and the lack of “specific mindfulness practices that can be easily incorporated into daily life” (Sanko, et al., 2016, p. 145). It seems that the heavy modifications and steering away from the essential components of an MBP may have impacted students’ ability to translate the new knowledge into daily life.

*CD and dvd.* Similar to other non-traditional offerings, CD and DVD courses present challenges. Warnecke, et al. (2011) carried out a randomized controlled trial of how a daily 30-minute mindfulness meditation CD effected medical students’ stress and anxiety levels. This course did not include didactic education, experiential assignments, informal practice, or group work, only formal meditation. Of the 31 students in the treatment group, 64% completed the daily practice record and those 20 participants reported practicing with the CD an average of 26 days out of the planned 52. Again, lower participation seems to correlate with non-group programs, but in spite of the 50% participation rate, positive changes in perceived stress per the PSS and anxiety as part of the DASS did reach statistical significance. Depression as part of the DASS did not change substantially. No other outcomes were expected.

Phang, et al. (2015) offered medical students the Mindful-Gym program in a DVD format and found very positive results with significant positive changes in perceived stress, mindfulness, mental distress, and self-efficacy. This five-week version of the program is heavily influenced by MBSR and the DVD included all of the essential components of an MBP but does not provide a group discussion opportunity. Sixty-three percent of the participants reported practicing the assigned exercises on half of the days of the week during the course; but in six-month follow up surveys, students were practicing less than half of the days in the week, which the authors believe explains why the positive changes were not sustained to that point in time (Phang, et al., 2015). These findings support the observation that a discussion group may be important for regular participation, and frequency of practice does serve a purpose in achieving and sustaining positive outcomes.

**Course length and meeting times.** The longer the course, the more likely it is that credit was awarded, but the range of course length follows a near perfect bell curve. Six programs lasted zero to four weeks, 14 courses were five to 10 weeks in length, and seven offerings were 11-16 weeks long. Most courses met one day per week for 90 minutes. Four met twice a week and one, three times per week. Five courses met for 91-120 minutes while three met for greater than 121 minutes. Knowing the already tight schedules of healthcare students, a few researchers performed pre-course surveys or interviews to help determine an acceptable course length and weekly meeting schedule (deVibe, et al., 2013; Halland, et al., 2015; Jain, et al., 2007; Solhaug, et al., 2016). Nearly every author discussed the need for future research in determining optimal course format but, given the constraints of higher education and variability in discipline specific accreditation, this type of research is extremely challenging. The good news is that exact dosage may not need to be a priority.

Despite the extremely wide range of formats offered, only one program of 28 reported less than overall positive outcomes, and the rest reached statistical significance or achieved very positive qualitative findings in more than 50% of intended outcomes. The more important priority may be ensuring the inclusion of the essentials for MBPs as outlined by Crane, et al. (2016), in a course that can be integrated into the curricula of all disciplines at all levels.

### **Formal and Informal Practice (outside of class)**

In Crane, et al.'s (2016) outline of MBP essentials, sustained and intensive practice describes the nature of formal and informal practice. It does not however, define what sustained or intensive means. Of all the components in the courses evaluated, formal and informal home practice requirements have the most variability. Fourteen programs specified a daily formal home practice, three ranging from one to 15 minutes, seven ranging from 16-30 minutes, and four suggesting 31-45 minutes. Five courses suggested daily formal practice but did not specify a time requirement. Three courses also or instead of formal, suggested specific informal practice times. Four programs do not describe practice outside of class, but their discussion suggests that students did engage in individual practice on some level; and four programs did not require practice outside of class.

It is not difficult to understand the motive behind such wide variation, as systematic and routine practice produces the greatest challenge for students; and traditional MBSR expectations of 45 minutes per day appear to be unattainable (Erogul, et al., 2014; Stew, 2011). Additionally, most students report preferring informal practice over regimented formal practice (Stew, 2011). This problem is not unique to students. Sharpiro, et al. found that time requirement was the primary reason behind 44% of healthcare professionals dropping out of an MBSR course before completion (as cited in Moore, 2008). Several

authors discuss the need for understanding proper dosage. Erogul, et al. (2014) suggests that the in-class meditation and learning experiences must continue to play a significant part in this type of education, as despite less than optimal daily home practice, overall outcomes are very favorable. Perhaps a combination of shortened, easily accessible and systematically introduced practices, accountability logs, and group discussion could ease the burden of daily practice on students.

### **Silent Retreat**

The silent retreat serves to expand the students' capacity for meditation, provide them the opportunity to observe growth, and expose them to the benefits of periodic breaks from technology and role related stimuli (Kabat Zinn, 2013). Of the 28 courses examined, only five specifically discuss the inclusion of a silent retreat which ranged from five to eight hours, mode being six hours. It is clear that 11 programs did not offer a silent retreat, but twelve others do not make its inclusion or exclusion apparent. Erogul, et al. (2016) reported 100% attendance at the retreat, indicating at least some level of student interest. Given the mutually agreed upon need for reducing the daily meditation times, perhaps a significantly shortened retreat of three hours would be more appropriate to a wide range of students and still offer its intended opportunities for growth and exploration.

### **Teacher Qualifications**

The founder and primary stakeholders of the original MBSR program have strong opinions about the qualifications needed to effectively teach the course, as evidenced by their teacher training course and request that only those certified through this program teach the MBSR course. As discussed in Crane, et al. (2016), courses can still be considered MBPs

with appropriate variations toward meeting the needs of the population. Crane, et al. (2016) appears to extend this variability to teachers by outlining essential readiness:

1) Has particular competencies which enable the effective delivery of the MBP; 2) Has the capacity to embody the qualities and attitudes of mindfulness within the process of the teaching; 3) Has engaged in appropriate training and commits to ongoing good practice; and 4) Is part of a participatory learning process with their students, clients, or patients (p. 993).

Additionally, in discussing the “weft” of teacher preparedness, Crane, et al. (2016) identify the necessity of having, “knowledge, experience and professional training related to the specialist populations...” and understanding of related theories that support teaching in these contexts (p. 993).

This guide is obviously valued by fellow researchers as indicated by the high number of courses that specifically identify the instructors’ qualifications. Nine of the courses describe the instructor as trained in MBSR teaching, trained in mindfulness teaching, trained in mindfulness therapies, or an expert in mindfulness training. Many of these instructors are also practicing psychotherapists, counsellors, and/or yoga teachers. Seven courses were led by faculty members or one of the authors/researchers who also had various clinical training and/or yoga teacher training; while 10 studies did not identify the teacher or his credentials. Of those 10, three stayed very close to the MBSR format, so it may be possible the authors assumed the reader would know the teacher was by default, MBSR certified.

Niessen & Jacobs (2015) demonstrated respectable objectivity when discussing the struggle their mindfulness trainers had in bringing the mandatory person-centered nursing course to first year bachelor level students. The four trainers were described as university

lecturers and skilled mindfulness trainers who had undergone training at a certified training facility (Niessen & Jacobs, 2015); however, their lack of knowledge and understanding of adolescent development nearly nullified their credentials. Teacher embodiment of mindfulness is obviously crucial to being able to foster its development in students, but as indicated by Crane, et al. (2016), professional knowledge and understanding of the intended audience's unique needs, is also vital.

### **Chapter Summary**

This literature review reported on the many variations being utilized to provide introductory mindfulness education to healthcare students. Each offering examined, included creative ways to address course content, format, and teacher qualifications; and studied the impact of the education on students through a variety of research questions and outcome measures. When compared against the criteria for a mindfulness-based program as defined by Crane, et al. (2016), collectively, the 28 courses make meaningful contributions toward the development of an offering appropriate for inter-professional education at all academic levels.

## **CHAPTER THREE**

### **METHODOLOGY**

#### **Guiding Framework**

In 2014, the American Occupational Therapy Association (AOTA) published the 3<sup>rd</sup> edition of the Occupational Therapy Practice Framework: Domain and Practice, which details the integral components that define occupational therapy practice (AOTA, 2014). This latest edition includes a revision to the statement describing the practice domain of O.T. to more heavily emphasize health and participation in life; “All aspects of the domain, including occupations, client factors, performance skills, performance patterns, and context and environment, are of equal value, and together they interact to affect the client’s occupational identity, health, well-being, and participation in life” (AOTA, 2014, p. S4).

Guided by the same professional intent in 2017, the AOTA released its Vision 2025 stating, “Occupational therapy maximizes health, well-being, and quality of life for all people, populations, and communities through effective solutions that facilitate participation in everyday living” (AOTA, 2017, p. 1). Pizzi & Richards (2017) applaud the vision and believe it calls for a paradigm shift that instead of focusing on performance, prioritizes participation in daily life, and connects participation to overall health and well-being. Toward emphasizing these outcomes through direct OT evaluation and treatment services, Pizzi & Richards (2017) envision a focus on health that, “...includes addressing the physical, social, mental and emotion, and cultural aspects of doing, being, becoming, and belonging” (p. 4).

To accomplish this long-term shift in professional focus, Pizzi & Richards (2017) advocate for the mandatory adaptation of formal occupational therapy education toward

developing student competency in assessing well-being and quality of life, identifying client-centered participation-based outcomes, and providing effective evidence-based treatment toward achievement of such goals. Additionally, to support and inform the transformation in professional OT education, Pizzi & Richards (2017) challenge researchers to explore the relationship between participation in occupation and health promotion and develop tools for evaluation and models for intervention.

Developing an introductory mindfulness course for OT and other healthcare students that encourages the integration of mindfulness into daily life and nurtures an awareness for and practice of good self-care, promotes AOTA's 2025 vision and answers the call for change in academic programming and expanded research. The dual purpose of this project: designing a course and studying student experience, is collectively guided by this vision. As separate entities, the course and study designs are informed by theories from the fields of psychology and education.

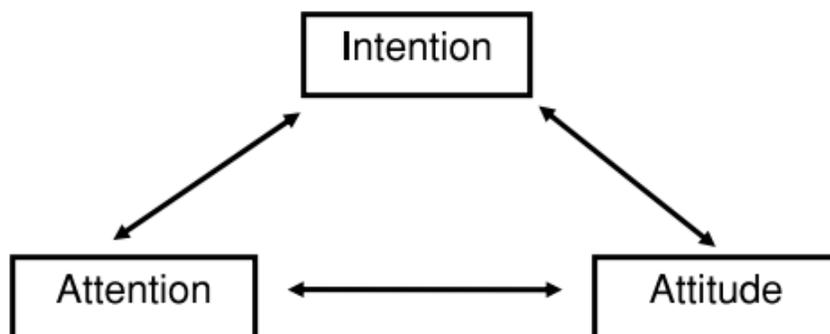
## **Methodology of Course Design**

### **Theoretical Basis**

The design of the course, IHS 350 Mindfulness for Self-Care is guided by Shapiro, et al. (2006) Mechanisms of Mindfulness (IAA) model, as well as the learning concepts, embodied knowledge and reflection.

**Mechanisms of mindfulness.** As briefly described earlier when defining mindfulness, a practice consists of three independent, yet highly interconnected tenants: intention, attention, and attitude. Shapiro, et al. (2006) identify these components as axioms in their Mechanisms of Mindfulness model (see Figure 3.1). The model communicates that

the three axioms, “...are not separate processes or stages – they are interwoven aspects of a single cyclic process and occur simultaneously” (Shapiro, et al., 2006, p. 375).



*Figure 3.1.* Mechanisms of Mindfulness (IAA). This model illustrates the simultaneous nature and interconnectivity of three core components of mindfulness practice. “Mindfulness is this moment-to-moment process” (Shapiro, et al., 2006, p. 375).

Shapiro, et al. (2006) offer this model as a theory toward understanding how mindfulness training, through, “intentionally (I) attending (A) with openness and non-judgmentalness (A), leads to a significant shift in perspective” (p. 377). They term this shift, *reperceiving*, and believe it serves as a “meta-mechanism of action” that influences four other mechanisms: 1) self-regulation, 2) values clarification, 3) cognitive, emotional, and behavioral flexibility, and 4) exposure (p. 377). Shapiro, et al. (2006) suggest that learning to regulate self can greatly improve health and well-being; that reinterpreting values that were once held as given truths by culture and upbringing, can lead to the discovery of different values that may be more compatible with the true self; that reappraising toward a new understanding of habitual opinions and reactions, can prompt a person to learn to see situations through a lens of reality versus learned assumption; and through exposure, a person may expand their tolerance for events and situations outside of their comfort zone, even to the degree of more effective management of physical and emotional insult.

The process of re-perceiving is important toward developing an ever-evolving knowledge of self, which includes recognizing the need for, developing tools for, and practicing good self-care. Within the scope of self-care lie numerous concepts that can benefit from re-perceiving: stress reactivity, coping, communication, relationships with people, relationships with food, balance of work and rest, and defining enjoyment. Modeling for and nurturing students toward an increased capacity to re-perceive themselves and the world around them in a more holistic and healthy way, that it may lead to a higher quality of life both personally and professionally, is the theoretical basis of the course, Mindfulness for Self-Care.

**Embodied Knowledge and Reflection.** Ancient Aristotelian philosophy valued the role of sensation, emotion, and spirituality in developing knowledge; knowing was more emotional, internal, and connected to the natural world (Aristotelianism, 2016). Nineteen hundred years later during the scientific revolution, Cartesian philosophy viewed the mind and body as separate entities (Surry, n. d.; Clark, 2011). The mind was valued as the primary source of knowledge and the body and its senses were deemed unreliable and inferior (Surry, n. d.; Clark, 2011). With the influence of Eastern philosophy, Western views have begun shifting back to a more holistic understanding of knowledge. The study of embodied learning demonstrates this change.

“Embodiment and embodied learning generally refer to a broader, more holistic view of constructing knowledge that engages the body as a site of learning, usually in connection with other domains of knowing (for example, spiritual, affective, symbolic, cultural, rational)” (Freiler, 2008, p. 39). Although Freiler’s definition recognizes the multi-faceted nature of this type of experiential learning in that it draws on the experiences of the body,

mind, spirit, culture, and emotions to make meaning and formulate knowledge, it does not directly recognize the role of reflection (Larrison, 2016). To understand how reflection makes a significant contribution to translating embodied learning to embodied knowledge or knowing, the work of several researchers will be discussed.

French philosopher Merleau-Ponty believed that man comes to understand the world, not by viewing it as an outsider, but by experiencing it through his inhabited body (Stolz, 2015). He suggested two states of bodily perception when interpreting experiences: the pre-reflective, which exists in the body from previous experience and the reflective, which forms additional meaning of the experience by comparing it to the pre-reflective (Merleau-Ponty, 1945). Philosopher and psychotherapist, Eugene Gendlin coined the term, *felt-sense*, an internal and highly integrated bodily conceptualization of past and present experiences that allows a person to sense his present situation and any incongruence (Jordi, 2011). The felt-sense is not stagnant, but rather, “always urges forward, demanding words or a thought or an action” (Jordi, 2011, p. 192).

Gendlin also developed a psychotherapeutic technique called *focusing*, through which a person can reflect on the bodily felt-sense to gain further insight into himself and how he exists in the world (Jordi, 2011). Seeking to expand the practice of reflection in experiential learning, Jordi (2011) suggests a framework for deliberately integrating it; while Lawrence (2012) adds that reflection has a role in bringing feeling and experience into consciousness. As a backdrop to their study exploring the impact of embodied learning on adult creative writing, Tobin and Tisdell (2015) highlight the similarities between Merleau-Ponty’s pre-reflective, mind-body knowing, and Gendlin’s felt-sense; suggesting they both move forward toward reflection in an on-going, back and forth process that Gendlin calls “zig-zag” and

Merleau-Ponty refers to as “spiraling”, that ultimately contribute to a more informed felt-sense (p. 218).

In his article on reframing reflection, Jordi (2011) recognizes this back and forth, “...dialogue between what is emerging to become explicit in our cognition on one hand and our non-conceptual experiencing on the other”; and suggests that “through integrative reflective practice, this dialogue constitutes the learning edge of human experience” (p. 182). Schön’s contribution of reflection-in-action provides additional insight into how human beings construct knowledge during an experience (Schön, 1987), and supports the idea that the act of embodied learning translates into embodied knowledge at least partly, through the mechanism of reflection.

This cyclic, back and forth action is very similar to the manner in which the practice of mindfulness informs and is informed by a state of mindfulness. Reflection-in-action or a continuous dialogue, as Jordi describes it, serves as the informant in both cases, and somewhat prohibits a distinction being made as to which comes first, the practice/learning or the state of mind/knowledge. An even greater connection exists between mindfulness and embodied knowledge beyond their mutual dependency on reflection; not only does embodied learning serve as a tool for practicing mindfulness, mindfulness is a form of embodied knowledge or knowing.

IHS 350 Mindfulness for Self-care is designed to be a highly experiential course, providing students daily opportunities to engage in embodied learning activities and reflect in their midst, toward developing greater knowledge of self and its relationship with health and wellness, other people, and the environment. Complimenting the experiential assignments, the course format provides ample opportunity for students to reflect through private

journaling, assigned reflections, practice log questions, artwork, and group discussion. These reflections for the most part occur after the experience and can be best explained by two additional types of reflection: reflection-on-action, and critical reflection. Schön's (1987) reflection-on-action describes the process by which people learn from their experiences by intentionally thinking about them or processing them afterward (as cited in Merriam & Bierema, 2014). Brookfield (1991) believes that through critical reflection, a person can encounter the need for and adopt a new perspective, suggesting three phases of this process: 1) recognition of beliefs and opinions that guide thought and action, 2) evaluation of those beliefs and opinions against current reality, and 3) restructuring those beliefs and opinions to be more accepting and commutual with reality (as cited in Merriam & Bierema, 2014). Embodied learning and reflection are the tools by which the IAA theory is applied in designing and teaching the course, Mindfulness for Self-Care.

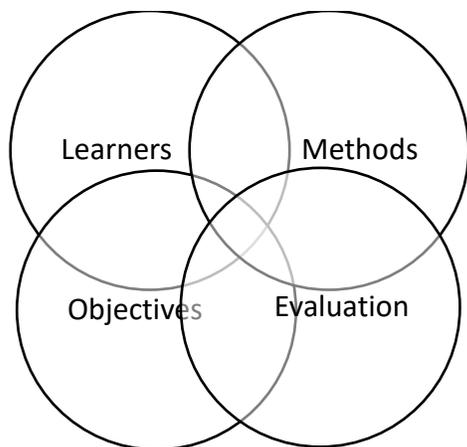
### **Overview of Course Format and Content**

As discussed in the literature review, there is much variation in the format and content of the mindfulness courses being offered to healthcare students. Mindfulness for Self-Care is an attempt to combine the more meaningful aspects of courses already offered with creative solutions for the less successful components. The following summarizes its format and scope of content. IHS 350 Mindfulness for Self-Care is a graded, hybrid course worth 3-semester hours of credit. It meets face-to-face weekly for 90 minutes for 15 weeks. Students are required to engage in formal practice for 10-15 minutes per day, five days per week, and participate in informal practice two times per week. A three-hour off campus silent retreat is scheduled during week 14. The content covers foundations of mindfulness, self-care, the neuroscience of mindfulness, body awareness, stress reactivity, emotional

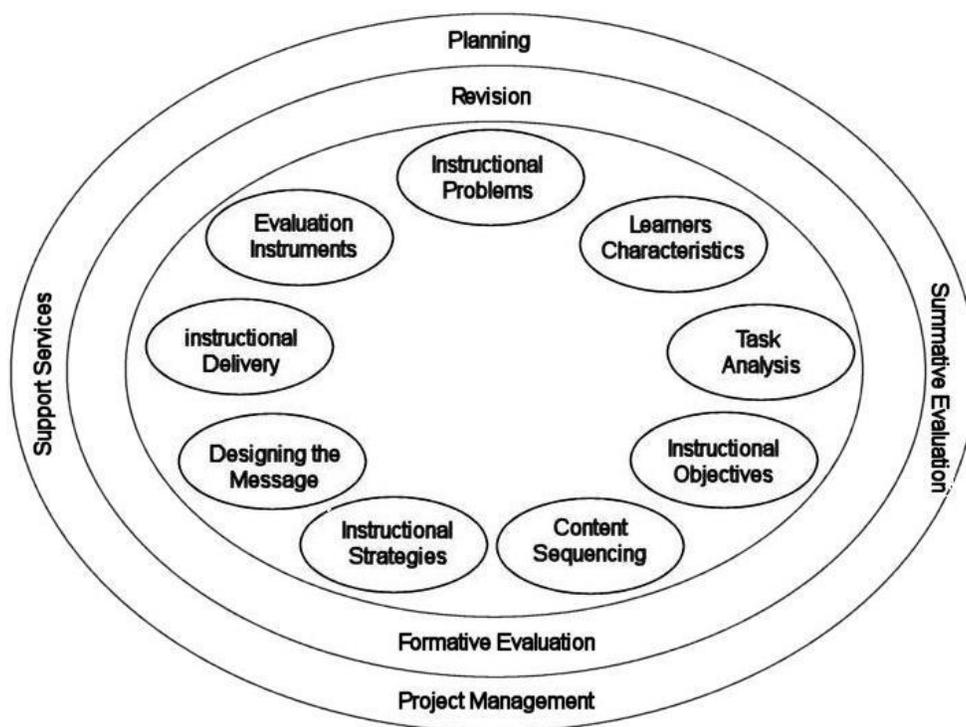
intelligence, self-regulation, flow, effective communication, embodied learning, self-compassion, effective coping, and healthy eating and sleeping habits. The content is delivered through didactic lecture, scholarly readings, formal and informal practice, experiential assignments, group activities, group discussion, reflective journaling, and writing assignments. The scope of content, format, and instructor's qualifications meet the criteria of a mindfulness-based program as defined by Crane, et al. (2016). A full description of the course and its weekly lesson plans can be found in the Faculty Syllabus Appendix (see Appendix A) and Weekly Lesson Plans (see Appendix B), respectively.

### **Course Design Process**

The course design process was chiefly informed by Morrison, Ross, Kalman, and Kemp's (2013) book, Designing Effective Instruction. Their Fundamental Components of Instructional Design model (see Figure 3.2) served as a constant reminder to maintain balance in the design; while their Components of the Instructional Design Plan (see Figure 3.3) provided a detailed roadmap, through which I could order the starting point, destination, and stops along the way. The instructional design path is not a linear one, and because I fulfilled multiple roles in the process, it is important to illustrate how the ongoing processes constantly interacted with the fundamental components. The proceeding discussion describes in detail my experience and uses headings labeled (C) to identify the fundamental components and (OP) to designate the ongoing processes.



*Figure 3.2.* Fundamental components of instructional design. This model illustrates, “...the framework for systematic instructional planning” (Morrison, et al., 2013, p. 14).



*Figure 3.3.* Components of the instructional design plan. This model illustrates the nine elements of instructional design without a distinct starting point, surrounded by the six ongoing processes that inform, support, and evaluate the design (Morrison, et al., 2013, p.12).

**(C) Identifying the instructional problem.** The initial motivation for suggesting a mindfulness course to the chairperson of the OTA program was simply passion for what I was currently learning through writing a research paper and wanting to tell someone about it, combined with the possibility she might be interested in expanding the interdisciplinary studies courses. Despite the fact there was not an immediate instructional problem, she was very interested and soon scheduled a meeting for me to share the idea with the Provost and another faculty member. I realized during the presentation that anticipating and responding to the needs of students, educational trends, and accreditation standards is an ongoing instructional problem in higher education (Morrison, et al., 2013). My audience immediately recognized the potential of this course toward expanding their graduation with distinction program, supplementing the current inter-disciplinary pool of courses, and even meeting accreditation standards for a new degree program expected to come on board in the next two years. Three months after the initial meeting, the curriculum committee presented the instructional problem to me: develop and teach a 3-semester hour credit mindfulness course appropriate for all disciplines and all degree levels.

**(OP) Embracing the role of project manager.** The committee's charge to develop the course made me the natural project manager, a role I was grateful to fulfil because it allowed me to influence the scope of the project and the speed at which it came to fruition, within the parameters of the college's policy and procedures (Morrison, et al., 2013). In addition to being a great encourager, the OTA chairperson served as a liaison to the administration, keeping me informed as to the order of the approval process. We communicated at least twice a month and sometimes weekly via face-to-face or email updates.

**(OP) Planning.** As developer and teacher of the course, I was responsible for 100% of the planning. Again, a role I was grateful for, as it allowed me to identify the purpose of the course and course level, establish the learning outcomes, choose the texts, create the content, determine the delivery method, create assessments, provide updates to the primary stakeholders, educate the faculty, and identify facility and equipment needs. My first task in planning was to seek the advice of four subject matter experts (SME).

The first was the chairperson of the OTA program. Through a face-to-face conversation, we discussed her experience in bringing other courses onboard; her opinion on course length and weekly schedule; the short and long-term plan for the course including potential students and methods of delivery; and format of outcomes. She advised that the outcomes should be steeped in the levels and language of Bloom's Taxonomy (Bloom & Krathwohl, 1956). The second SME I met with was the instructional designer (ID) at CCHS. We discussed student learning outcomes and measurable outcomes required by the college. She shared a valuable piece of advice based on the writings of Steven Covey. "Begin with the end in mind" (Covey, 2013). She uses the mantra when setting student learning objectives (SLO), implying that to select appropriate texts, build relevant content, and create meaningful assignments and assessment tools, I must first decide what the students are supposed to learn in the course. She concurred on the use of Bloom's Taxonomy and recommended balancing the thinking level of the outcomes so that the average is equal or slightly above the course level, in this case a 300-level offering.

With a plan for formulating the outcomes, I reached out to another SME, a qualified MBSR instructor and licensed Psychologist, who had also facilitated the MBSR course I attended, to discuss the scope of content. Through phone conversations and email

exchanges, I processed out-loud my ideas for linking mindfulness and self-care, specifically thoughts about how to best expand the content to include texts from other fields of study. We discussed meditation audios and he suggested mindfulness authors that may be relevant. In this same vein, I sought the advice of a fourth SME, a certified Mindful Yoga Teacher, who specializes in using mindfulness and yoga to manage chronic pain. I brainstormed with her about the extent I wanted yoga to be a part of the course and we discussed meditations and class flow.

**(C) Defining learner characteristics.** Familiar only with the general characteristics of the OTA students, I needed to understand the learners in other programs. Examining the data sets available on the college website, talking with faculty, and observing day-to-day operations at the college, confirmed the potential course registrants would be predominately white females ranging in age from 18 to 50+ years who are pursuing healthcare degrees from associate level to master level; have prior education from high school diploma to master degree; have work experience in a former career ranging from zero to 20+ years; are enrolled in programs delivered in one of three formats, traditional face-to-face, hybrid, and fully online; and are completing their education on either a full time or part-time basis.

Based on the age and experience of potential students, it could not be assumed they would all benefit from a purely adult learner approach. I would need to rely upon my professional understanding of adolescent development and learning needs to build in flexibility for presenting the course from a blended pedagogical and andragogical framework. It was also important to recognize that for at least the first offering, student registration would be voluntary, most likely driven by personal interest or even perhaps previous history with mindfulness practice. For future offerings, depending on the level of mandate by the

college administrators, prior mindfulness experience could be zero to extensive, and the course would need to be able to meet the needs of all levels of preparedness.

**(C) Identifying Instructional Objectives – 1.** Morrison, et al. (2013) discuss three domains of learning objectives; cognitive, psychomotor, and affective, and stress the importance of their overlap and relationship to one another. Using Bloom’s Taxonomy and its revision as guides, I identified seven student learning outcomes (SLOs) for the course, what Bloom calls educational goals (Bloom & Krathwohl, 1956; Anderson & Krathwohl, 2001; Krathwohl, Bloom & Masia, 1964). Table 3.1 lists each SLO, identifying its domain and thinking level. These outcomes can also be viewed in the Common Course Syllabus (see Appendix C).

<i>Domain and Level of Student Learning Outcomes</i>		
SLO	Domain	Level
Recognize the value of self-care for wellness and prevention of burnout in healthcare professionals.	Cognitive Affective	II -Understand I - Receiving
Utilize the practice of mindfulness toward assessing and improving personal self-care habits.	Cognitive	III-Apply
Apply the precepts and attitudes of mindfulness to everyday life.	Cognitive Affective	III-Apply III-Valuing
Discover the positive relationship between systematic and routine mindfulness practice and self-regulation.	Cognitive	IV -Analyze
Examine the synergetic relationship between mindfulness and self-compassion, and their functions in reducing suffering.	Cognitive Affective	IV-Analyze II-Responding
Employ embodied learning strategies toward increasing awareness, knowing, and overall well-being.	Cognitive Affective	III-Apply III-Valuing
Relate research from other fields of study toward an ever-expanding understanding of mindfulness.	Cognitive Affective	IV-Analyze IV-Organization

**(C) Performing contextual analyses.**

***Orienting context.*** As described above, for the first offering student registration would be voluntary and may reflect a certain level of interest or experience with mindfulness,

but future offerings may draw students with no interest. Care would need to be taken to educate students as to how the course could be beneficial to them currently in their student role as well as in the future when they become practicing clinicians. This process would have to begin with educating the faculty on the purpose, desired outcomes, and expected delivery timeline of the course, and advertising the course to students through other classes, signage, and web communication. It would also be important to communicate that the course is a 3-hour credited and graded elective that has the capability of fitting into their existing curricula. The credit could stimulate motivation to take the course and the grade may encourage increased accountability and performance.

***Instructional context.*** For this area of context, I again sought the input of the SMEs. I met with the instructional designer at CCHS to discuss the delivery format and assignment weighting. Based on the literature, care had to be taken not to overload the students with academic work and daily practice; but enough rigor was needed to justify credit, and the daily practice was necessary to reinforce learning. In an effort to emphasize the personal value of the daily informal and practice and motivate students to regularly complete it, I wanted to communicate that I recognize the challenge daily practice presents. I wanted to give them credit for the practice time by counting it toward the required three hours per week face-to-face learning but did not know how to make it work. The ID had a great idea of offering the course in a hybrid format, meeting weekly for 90 minutes and allowing the daily home practice and online completion of the reflective practice log to serve as the remaining 90 minutes. Calculating the daily 15-minute practice, five times per week, over 16 weeks and adding it to the three-hour retreat accounted for the other 1440 minutes of the total 2880.

Applying more weight to the practice log assignments and an honor signature could also serve as a motivator for students to complete it. During this meeting, we also discussed the newly outfitted smart classrooms and upgraded technology. The room and furniture layout would be important for experiential group activities and floor exercises, and the projector capability for video presentations. The fifth SME I utilized was the instructional technologist at CCHS. We discussed the capabilities and nuances of the learning management system, Canvas, specifically as it relates to uploading meditation audio and video files and structuring quizzes.

With the delivery format determined, I returned to the OTA chairperson to find a spot in the college schedule to offer the course. Because so many of the programs are online or hybrid and this course would require a weekly face-to-face meeting, finding a time that would meet the needs of many programs was impossible. We decided to cater the inaugural course to the OTA schedule because these students were already on campus full-time and their associate degree level could provide valuable feedback about the difficulty level of the course.

*Transfer context.* A primary goal for the course is for students to integrate what they are learning about mindfulness and self-care into their daily lives and ultimately into their professional practice. In an online presentation, Shauna Shapiro, a contributor to the IAA model, shares an experience with a monk while at a mindfulness retreat. He reminded her, “What you practice gets stronger” (Shapiro, 2014). This is the intent of daily practice, application activities, and discussion: encouraging students to experiment and apply the skills and understanding to a multitude of life situations.

**(C) Analyzing the task.** The best way to approach the actual course development was to see it as one giant task, made up of multiple components. With the overall student learning outcomes as a guide, I began sketching weekly lesson plans and decided on a consistent format for each week to follow (see Table 3.2). Having this format was a tremendous help when selecting text and building the actual content because it reminded me of what I was looking for and trying to achieve.

Table 3.2
<i>Weekly Lesson Plan Format</i>
Student learning outcomes
Required materials
Face-to-face class sequence: <ul style="list-style-type: none"> <li>• Completion check for due assignments</li> <li>• Themed introduction</li> <li>• Group sharing of previous week experiences, insights, questions, concerns</li> <li>• Guided formal meditation</li> <li>• Group application activity</li> <li>• Lecture/discussion of new topic and introduction to the week's assignments</li> </ul>
Assignments for the week <ul style="list-style-type: none"> <li>• Materials needed</li> <li>• Daily Practice Log Requirements <ul style="list-style-type: none"> <li>Formal practice - broken down by day and meditation</li> <li>Informal practice</li> <li>Required observations</li> </ul> </li> <li>• Reading Assignments</li> <li>• Experiential or Journal assignment</li> <li>• Quiz details</li> </ul>
Supplemental material such as handouts, meditation narratives

Another area of task analysis discussed by Morrison, et al. (2013) is the knowledge and information needed by the teaching expert. Crane, et al. (2016) identified teacher qualification as a standard for mindfulness-based programs. I highlighted my professional credentials earlier in the positionality section, but an additional knowledge is necessary for adequately presenting the course to students in a way that is authentic and meaningful; the understanding that can only come from personal commitment to mindfulness practice.

Pratt (1998) offers three indicators of an instructor's commitment: *actions*, *intentions*, and *beliefs*. Actions are the techniques used in adult education to, "...engage learners with the content..." and promote learning (Pratt, 1998, p. 17); "Intentions are general statements that point toward an overall agenda or sense of purpose", and beliefs are theoretical representations of basic convictions (Pratt, 1998, p. 18). By consistently assessing the alignment of these three components of teaching, allowing them to inform one another and to check one another, the teacher can deliver a more authentic version of herself to students and is therefore perceived as more genuine, which can only positively influence learning. Palmer (2007) sums this up beautifully in her book, The Courage to Teach: Exploring the Inner Landscape of a Teacher's Life, "...good teaching cannot be reduced to technique; good teaching comes from the identity and integrity of the teacher" (p. 10).

**(C) Building the content.** Designing the course and building the content began to merge into one multi-dimensional process. This was a very enjoyable process but also quite tedious. The most difficult aspect by far was selecting the required texts.

**Primary required textbooks.** I read several books, dozens of articles and independent chapters, and scanned dozens of web-based documents. Deciding to create the course within the criteria for a true MBP, made the text book problem more manageable. Because of the success of MBSR and the extensive writing and research its founder, Jon Kabat-Zinn has produced, it suddenly made perfect sense to use his book, Full Catastrophe Living: Using the Wisdom of Your Body and Mind to Face Stress, Pain, and Illness. This book has sold millions of copies and is applicable to people of all ages, backgrounds, and current life situations. It reads more like a story and reflection of Kabat-Zinn's experience in leading dozens of MBSR groups over decades. I selected only the chapters and portions of those

chapters that would help students understand mindfulness and how it translates to self-care, leaving the rest for optional reading. Because the course is at an introductory level, I wanted to include an additional textbook, a lighter read to provide students with a quick reference and aid toward grasping this awareness, called mindfulness. I selected Jon Kabat-Zinn's Mindfulness for Beginners: Reclaiming the Present Moment – and Your Life. It again, reflects Kabat-Zinn's years of personal practice, but it reads like a daily devotional, offering a simplified view of many of the concepts. It also included a CD of beginner meditations that could supplement the ones I would include in the weekly modules.

***Additional required reading.*** Offering the course for college credit created a challenge to provide enough rigor while allowing students to explore, experience, and settle in to the practice and life-style promoted by mindfulness. I decided to use scholarly articles as additional readings to reinforce in a more concrete and scientific way, the abstract concepts learned from the textbook and class, and broaden the students' perspective on how mindfulness relates to other fields of study and professional practice. Reading scholarly articles also serves to enhance the students' literacy level. The full list of additional texts can be found in the Faculty Syllabus Appendix (see Appendix A). They include topics such as mindfulness and self-care, the neuroscience of mindfulness, attention regulation, emotional intelligence, flow, effective communication, embodied learning, self-compassion, effective coping, loving-kindness, and selfing.

**(OP) Project management.** Having decided on the additional required reading, I needed to make sure these chapters and articles could be made available to students within the *fair use* guidelines. Fair use allows the reproduction and use of copyrighted materials without the permission of the author or copyright owner, under certain circumstances. I used

the NCSU libraries' online resource (NCSU, n.d.) and Harvard University's general council online resource (Harvard University, 2018), spoke with an NCSU librarian over the phone, and exchanged emails with the medical librarian at CCHS to make sure my actions were falling within the scope of fair use. Both librarians confirmed, based on their interpretation of fair use, that my use does not exceed the intent of the copyright provision.

The purpose in making the chapters or articles available is purely for the non-profit education of college students to increase exposure and stimulate thought and discussion. The works included are scholarly articles that have been published in journals, independent chapters published in books, or teaching content posted online with open access. None of the selected chapters exceed one chapter or 10% of the book's total length and none contain the "heart" of the book (Harvard University, 2018). For the first offering, student registration will be less than 10 students so competing with the copyright author's sales is not an issue. If the course gains popularity and student numbers increase, I will seek advice on requesting permission from the individual authors for repeated use.

***Meditation audio files.*** I listened to dozens of copyrighted, open accessed and recorded meditations to find ones that would fit perfectly with the reading material topic and coincide with the difficulty level of each module. This was the second most challenging aspect of content development from a thematic point of view and also from a copyright and consistent access concern. I decided to make the recordings myself. This allowed for customization in content and length, and completely removed any copyright concerns. Several classic meditations like Jon Kabat-Zinn's mountain meditation, are also included because they have been openly accessible online for quite some time.

**Content sequence.** Based on the research, I believe students need to be gradually introduced to mindfulness. Instruction should begin with easily relatable concepts and single focused meditations, and the material should be chunked into weekly modules toward increasing their knowledge, understanding, tolerance, and integration of mindfulness practice over the course length. This belief required the marrying of Posner and Strike’s learning-related and concept-related sequencing schemes as described by Morrison, et al. (2013). The vocabulary, foundational tenants, attitudes, basic science, formal practice and early experiential assignments would be introduced on a learning level; while the application of these into informal practice, more abstract assignments, and daily life would be introduced on a more conceptual level. With the required text, meditations, and sequencing plan decided, it was time to develop the weekly instructional objectives to plug into my weekly lesson plans toward building out the weekly content.

**(C) Identifying Instructional Objectives – 2.** Turning again to Bloom’s Taxonomy, I identified three to five student instructional objectives for each weekly module. Table 3.3 lists a sample of these objectives with their domain and thinking level. All the instructional objectives can be viewed in their respective weekly lesson plan (see Appendix B).

<i>Domain and Level of Weekly Instructional Objectives (A Sampling)</i>		
Instructional Objective	Domain	Level
Assess current self-care habits	Cognitive	V-Evaluate
Discover the positive influence mindfulness has on attention regulation	Cognitive	IV-Analyze
Relate mindfulness and the freedom to “think outside of the box”	Cognitive	IV-Analyze
Practice the body scan meditation	Psychomotor	III-Practicing
Compare and contrast destructive mind states (greed, aversion, delusion)	Cognitive	IV-Analyze
Discuss the role of body awareness in mindfulness	Cognitive	II-Understand
Apply the practice of acknowledging stress, toward managing it.	Cognitive Affective	III-Apply III-Valuing

**(C) Identifying instructional strategies.** With the weekly learning objectives in place, I could begin identifying what strategies would be used to deliver the content. The research indicates the course needs to be highly experiential, reflective and multi-modal, giving the students as many opportunities as possible to grasp the concept of mindfulness in the way that suits them best. I drew upon my experience as an OT to create some of the assignments, and also searched through books, articles and the internet for group activities, journal prompts, and experiential assignments to broaden the offerings. As a result, the course utilizes art, somatosensory activities, sound, lecture, face-to-face discussion, on-line discussion boards, reading, video, reflection, role play, competitive games, biofeedback, an off-campus retreat, and quiz taking as strategies to promote student learning. Ideas that can be linked to an author have been given proper credit in the weekly lesson plans (see Appendix C).

Jonassen's generative categories of instructional strategies as described by Morrison, et al. (2013), helped me to effectively dose the material. For example, during the first class meeting, students are introduced through interactive lecture, modelling, and practice, to definitions of mindfulness and self-care, the three tenants, the seven attitudes, the breathing meditation, and the difference between formal and informal practice. They are given a laminated reference card containing this information to place in their car, their workspace, or other frequented place, as a reminder of the foundational information. This promotes the first strategy, recall (Morrison, et al., 2013). At the second class meeting, students submit their first typed practice log and handwritten journal and participate in a group discussion about their weekly experience. This exemplifies the second strategy, integration (Morrison, et al., 2013). As the weeks progress, assignments and discussion are focused on recognizing

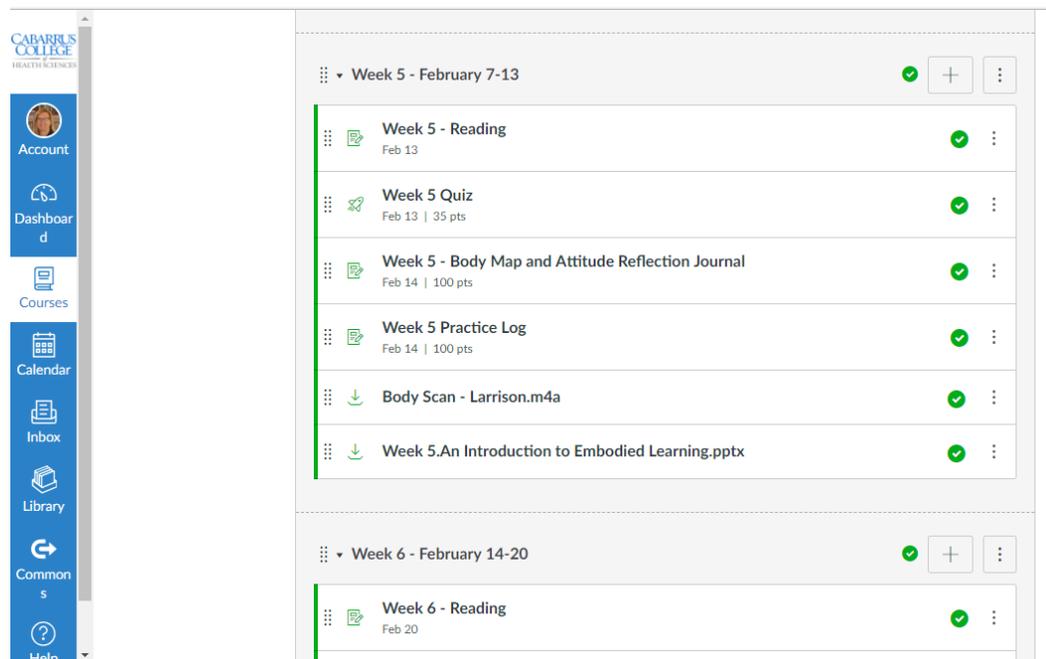
opportunities to practice mindfulness and applying mindfulness in informal practice, reflecting the third strategy, organization (Morrison, et al., 2013). After the midpoint of the course, emphasis is placed on applying mindfulness to all aspects of daily life, view of self and others, and world perspective, demonstrating the fourth generative strategy, elaboration (Morrison, et al. 2013).

**(C) Designing the message and developing instructional materials.**

*LMS format.* The learning management system, Canvas, is a fantastic forum for delivering instruction as well as storing past and future instructional ideas. Because of the experiential and reflective nature of the course, it is not conducive to self-paced learning. I divided the content into 16 weekly modules, giving students access to two weeks at a time. This minimizes extraneous cognitive load by allowing them to focus only on the current content and anticipate the next week's workload without feeling overwhelmed by the whole course at once (Morrison, et al., 2013). It also controls the step size (Morrison, et al., 2013), giving students the freedom to spend quality time in each module. An important message in mindfulness is the idea of slowing down to appreciate life through awareness, versus constantly striving to complete something. If access to the modules were not limited to two weeks at a time, I am certain students would blaze through the assignments without embracing the learning that can come from each one.

The home page lists previously opened modules, the current and next module, and has a running calendar of upcoming due dates. The modules are identical in structure, so the students become accustomed to what assignments are due and how they are to be submitted. The amount of text is minimal, and each assignment within the module can be opened to a more detailed description. These descriptions also follow a consistent format, use headings,

and include the least amount of text as possible (Morrison, et al., 2013). I have found that well organized and thorough modules cut down on logistical questions and technological problems, so more time can be dedicated to in-class discussions and activities. Figure 3.4 illustrates the modules on the home page, and figure 3.5 shows the detail of an opened assignment link.



*Figure 3.4.* Sample of a weekly module in Canvas. This figure highlights the simple, user friendly structure of the weekly modules.

The screenshot shows the Canvas LMS interface for a course titled 'IHS350:81:AH Mindfulness for Self-Care'. The assignment is 'Week 6 - Viewing Reflection', which is published. The assignment details include a description: 'Viewing Reflection: (APA, submit online by 11:59 pm on day before next class) Watch 15-20 minutes of a sporting event with the volume muted. In other words, you will not hear the accompanying whistle blows, spectator feedback, or commentary. Write a 250 word reflection on the experience, including the particular game or match you watched, a summary of what happened, any insights, feelings, or thoughts you had while watching in silence; and how the experience compares to your usual format of watching sports.' The assignment is worth 100 points and is submitted via file upload. A table below shows the due date as Feb 20 for everyone, with no available from or until dates. There is also a '+ Rubric' button.

Due	For	Available from	Until
Feb 20	Everyone	-	-

*Figure 3.5.* Sample of assignment details in Canvas. This figure highlights the simple, yet thorough detail of assignments opened from the weekly modules.

Canvas also allows me as an instructor to store highly detailed lesson plans and have access to files that I may decide to share as an immediate need arises in class. Creating the weekly lesson plans was well worth the time. As I prepare to teach each week, I refer to that lesson plan and make any adjustments based on student need. This also is an invaluable tool in the event another teacher has to fill in at the last minute.

***Student forms and handouts.*** For consistency, the practice log format is identical week to week and can be handwritten or completed through the LMS. The color ink two-sided laminated card, mentioned earlier, serves as a tangible reminder of the core concepts of mindfulness and the benefits of daily practice. A highly detailed and graded yoga series handout with pictures was created to aid the students home practice in week six.

**(C) Developing evaluation instruments.**

***Pre- and post- mindfulness questionnaire.*** The rationale for choosing the Five Facet Mindfulness Questionnaire (see Appendix D) will be discussed more in the study methodology, as it serves as a data source. Even when the course is not connected to a study, this measurement tool will be used. It allows students to self-report the frequency with which they exhibit mindful behaviors and attitudes for comparison to a repeat of the questionnaire. It also allows the instructor to gauge the depth of understanding and integration that occurred over the course.

***Pre- and post- self-care assessment.*** The Self-Care Inventory (see Appendix E) is adapted from other models, is not standardized, and is not a valid instrument. It is meant for exploration and student eyes only. I will not see it at the beginning or end of the course. It serves as an evaluation tool in that it provides students with valuable information that they may include in their mid-term and final papers.

***Weekly assignments.*** The weekly experiential assignments, journal assignments, and practice logs allow me to evaluate student learning as they are all reflective in nature and are linked to the instructional objectives (Morrison, et al., 2013). Students may be asked to discuss the difference between informal and formal practice; describe how it felt to watch a sporting event on tv without sound or commentary; or compare their attention to an academic assignment after engaging in an embodied learning activity, to their attention under typical study habits. The weekly practice log assignments can be viewed in the Weekly Lesson Plans (see Appendix C); and a sample of three practice logs can be viewed in Appendix F.

***Quiz banks.*** To balance the highly experiential nature of the course and add academic rigor, I created open book multiple choice quizzes for every other module (see

Appendix G). The questions come directly from the reading text, so students are not required to inductively reason to be successful on the quiz, and they highlight the most important material. Their purpose is to ensure the students are completing the assigned readings and provide them with double exposure to the material. The quizzes are timed, and students have two attempts, with their average grade standing. At the first class meeting, students are encouraged to read the material for familiarity first, making notes in the margins, and then scan their notes for cues while taking the quiz.

*Midterm and final reflection assignments.* The mid-term and final papers are reflective and directly linked to the overall student learning outcomes (Morrison, et al., 2013). The mid-term assignment asks students to construct an opinion about the meaning of a poem relevant to the practice of mindfulness and discuss any changes they have noticed in their awareness or practice of self-care since the beginning of the course. They are also asked to discuss which aspects of mindfulness they find most helpful and why, as well as any challenges. The final goes one step further asking students to formulate a 4-page paper that discusses how their understanding of mindfulness and self-care has changed over the course and how this has affected them. Additionally, they are asked to construct an opinion as to the catalyst for these changes, and then predict how they may continue the practice in the future. To increase academic rigor and offer a contrasting mode of learning to the more flowing narratives of the weekly assignments, I attached a grading rubric to the final paper (see Appendix H).

**(OP) Implementing the design.** Once the course design was complete, I created the Common Course Syllabus (See Appendix C) and the Faculty Syllabus Appendix (see Appendix A) per CCHS templates and began the process of moving these documents through

the various people and committees for approval. This required completing an Academic Change Form indicating the desire to add a new course (see Appendix I). I met sequentially and received approval from my department chair, the instructional designer, and the director of institutional effectiveness before submitting the documents to the Provost. With her approval, I presented my course to the Curriculum Committee. Their acceptance moved it to the Provost Council and then the Academic Affairs Committee where the Provost represented the course for approval. At that point, the course was officially approved and could now be added to the college course catalog and website. I completed the necessary communication with the media specialist and librarian to add IHS 350 Mindfulness for Self-Care to all appropriate web pages and make it available for spring registration.

**(OP) Garnering Support.** With the course approved, I needed to advertise it to both students and faculty, so it could be a topic of conversation during registration advising sessions. I created a recruitment flyer (see Appendix J) and placed it throughout the college and asked the communications specialist to share it with all students and faculty through social media. The instructional designer invited me to present at the next faculty development workshop where I shared a PowerPoint presentation covering the history of the problem of burnout through the new course offering and guided the faculty in mindfulness exercises. The response was very positive from administration and faculty alike.

**(OP) Normative Evaluation.** Because this is a new course, I wanted to test a few of the assignments and activities to determine if they would indeed be effective (Morrison, et al., 2013). I used the new course lesson plans to create new content on mindfulness for the OTA Mental Health course and taught it to the second year students. It was a two-hour class in which I incorporated lecture through PowerPoint, mindfulness exercises, group activities,

and reflective discussion. The response was positive, and the activities went well. The experience confirmed that lecture is an important component of the instruction, that the meditations take more time than their actual length, and this topic requires ample time for discussion, meaning I should limit group application activities to one per class meeting.

I also treated each week during the actual course as an opportunity for normative evaluation. In grading the weekly practice logs and assignments, checking the journals for completion, and observing student discussion, I was able to gauge if the workload for that particular module was appropriate for those students; if the dosing of the material was on track or needed to be adjusted; if the required reading, practice assignments, and experiential assignments did in fact support each other the way I had planned; and if the students were grasping and integrating the material at a slightly deeper and more meaningful level each week. The midterm reflection essays also provided valuable insight into if the students were on track for meeting the student learning outcomes. These *in-process* forms of evaluation were crucial to the success of the course in that I was constantly making small adjustments to maintain a truly student-centered learning environment.

**(OP) Summative.** Three forms of summative evaluation were utilized to determine if the course was successful in helping students achieve the learning outcomes (Morrison, et al., 2013). Two of these evaluations also served as the data sources for this study. The first is the post-course Five Facet Mindfulness Questionnaire and the comparison of its scores to the pre-course questionnaire. This tool specifically measures trait mindfulness, which is reflected in a student's integration of mindfulness in her daily life. The midterm and final reflection papers served as the second summative evaluation. These papers assess not only the students' change in understanding and integration of mindfulness, but also the

understanding and practice of self-care as compared to the beginning of the course (as self-assessed through the private self-care inventory).

The third summative evaluation was the CCHS Course Evaluation, which all students are encouraged to complete. In addition to being a standardized survey that invites students to rate their level of learning, quality of instruction, teaching methods, workload, and other components, it allows instructors to add two questions specific to the course's student learning outcomes. Two scales of rating are used in the survey: 1) "not competent, needs improvement, competent, or highly competent"; and 2) "strongly disagree, disagree, neutral, agree, or strongly agree". I chose to embed the two student learning objectives specific to understanding and integrating mindfulness and understanding and practicing self-care.

**(OP) Confirmative Evaluation.** The three summative evaluations described above also serve as confirmative evaluations as their results are linked to the college's Compliance Assist software. This program allows the course outcomes to be tracked over several years (Morrison, et al., 2013), and requires instructors to make appropriate changes to the course toward consistently meeting student learning outcomes.

## **Methodology of Study Design**

### **Theoretical Basis**

In keeping with the guiding framework of AOTA's vision toward addressing health, well-being, and quality of life through participation, this study sought to reflect and affirm the theoretical model of *population health*. The population health model is what Creswell (2014) defines as a social science theory, as it is informed by medicine, politics, psychology, sociology, and education. It is an approach to healthcare that recognizes how determinants of health individually and collectively affect a person or group of people's health (Knickman &

Kovner, 2015). A population health model considers factors from five different domains to understand why some people are more likely to get sick and why others are more likely to stay healthy and even live longer (Knickman & Kovner, 2015). Instead of treating a specific illness or part of the body through the traditional “reductionist” medical model, the population health model seeks to understand and address the economic and social issues, environmental issues, genetics, level of medical care, and behavior that are contributing to a person or group of people developing a disease (Knickman & Kovner, 2015, p. 82). This study focuses on the 5<sup>th</sup> factor, behavior, toward improving quality of life and preventing the stress syndrome, burnout.

Two key components of change in a population health model are education and empowerment. By educating a person about the need for change and placing the tools for change within his reach, he can become more responsible for his own destiny, in this case, his health. The course, Mindfulness for Self-care provides both the education and the tools for the students enrolled. This study seeks to understand the depth to which the course fosters student understanding and integration of the knowledge and tools in their everyday lives.

### **Research Approach and Measures**

Guided by Solhaug, et al.’s (2016) suggestion that the multi-faceted nature of mindfulness is best understood through a combined quantitative and qualitative approach and Creswell’s (2014) support of utilizing social science theory in mixed-methods designs, this study is based on a convergent parallel mixed methods design. Such an approach allows the investigator to simultaneously collect both types of data, analyzing for corroboration (Creswell, 2014). The quantitative data was generated from a repeated measure while the

qualitative data was drawn from the participants' written reflections. Because the subject pool was very small, participants were selected via a convenience sample, and there was no control group, the quantitative data is reported anecdotally (Creswell, 2014).

**Quantitative (repeated measure).** The Five-Facet Mindfulness Questionnaire (FFMQ) (see Appendix D), developed by psychologist Ruth Baer, was selected as the repeated measure because of its good construct validity and internal consistency; and because, of the six most frequently utilized valid mindfulness questionnaires, it is the only one that considers all five of the mindfulness facets (Baer, et al., 2006). The survey is suitable for this inquiry because it is simple to administer face-to-face during the initial class meeting, describes the degree and frequency to which mindfulness behavior is practiced, can be easily repeated at the end of the course for comparison to the pre-course results, and allows the investigator to infer that similar outcomes may occur in larger populations (Creswell, 2014).

The FFMQ was developed through a factor analysis of five independently developed mindfulness questionnaires (Baer, et al., 2006). The self-reporting tool measures the mindful behaviors: 1) observing, 2) describing, 3) acting with awareness, 4) non-judging of inner experience, and 5) non-reactivity to inner experience; using a five-point scale with the following respective values: one = never or very seldom true, two = rarely true, three = sometimes true, four = often true, and five = very often or always true (Baer, 2006). Sample questions include, "I perceive my feelings and emotions without having to react to them" and "I do jobs or tasks automatically without being aware of what I'm doing" (Baer, 2006).

The facets are distinct and scored individually, but are highly interrelated; and therefore together, suggest an overall measure of trait mindfulness (Baer, et al., 2006). The FFMQ is positively correlated with meditation experience and quality of life, and negatively correlated with psychological symptoms and neuroticism in meditators and non-meditators from both adult and student populations (Baer, et al., 2006; Baer, et al., 2008). The FFMQ is expected to provide evidence of change in mindfulness behavior at the end of the course as compared to the start of the course. A positive change would suggest an increased understanding and integration, on some level, of mindfulness into daily life.

Despite the qualifications described above, there is a growing body of evidence suggesting that the FFMQ measures mindfulness differently in non-meditators than it does in meditators based on the inclusion of the “observing” element (Gu, et al., 2016). Because meditators are more practiced in observing, Gu, et al. (2016) suggests that the five facets be assessed only at the post mindfulness-based intervention time, and that four facets be measured at the pre-course time, to accommodate for the lack of observing practice in non-meditators. This concept is relevant to the current study in that none of the participants were experienced meditators when they entered the course but were after practicing daily for 16 weeks.

**Qualitative (written reflections).** Two written assignments were selected to serve as qualitative data; a midterm reflection paper and a final reflection paper. Both ask the students to describe their experience, specifically as it relates to understanding mindfulness and self-care, applying mindfulness to their daily lives, and practicing self-care. The assignments are graduated in that at the mid-term, the students are provided with a poem about mindfulness to spark their reflections, asked to respond to two questions in separate

essays, and given a minimum word count to discourage just superficial thoughts. The questions are less formal, giving the student freedom to share what aspects are most meaningful.

The final paper is attached to a grading rubric, has a minimum page count, and asks students to provide one well formulated and integrated response to four individual questions. This provides additional academic rigor to the course and teaches students a valuable skill needed in healthcare professions, the ability to assimilate and articulate knowledge. For both assignments, students are encouraged to draw from their journals, practice logs, group discussions, lecture, and experiential assignments over the length of the course to recognize and describe any changes.

*Qualitative research strategy, data analysis, and epistemology.* This form of qualitative research, suitable for small sample sizes of one to ten participants, is best described as phenomenological in that the investigator is interested in how individuals experience the phenomenon mindfulness, and how the experiences of several individuals represent the “essence” of that phenomenon (Creswell, 2014, p. 14). To capture this essence, the principle investigator analyzed the reflective papers using the six phases of thematic analysis: “1) familiarizing yourself with your data set; 2) generating initial codes; 3) searching for themes; 4) reviewing themes; 5) defining and naming themes; and 6) producing the report” (Braun & Clarke, 2006, p. 87). This process of analysis was selected for several reasons: first, it is flexible in that it can be used with many different research strategies; it is user friendly and suitable for investigators new to qualitative research; it allows for both inductive and deductive approaches to the data; and it permits the researcher to play an active role in identifying themes by thinking about and relating the data to her own experiences and

knowledge, versus simply allowing them to emerge (Braun & Clarke, 2006), what Creswell (2014) refers to as “reflexivity” (p. 186).

An inductive approach was used first to allow the qualitative data to drive the analysis versus it being guided by and coupled with the research questions (Braun & Clarke, 2006). The research questions were intended to prompt the students to think about several specific aspects of the experience, but not bind them to understanding or discussing each aspect in a certain way. The analysis was based in a constructionist paradigm in that the phenomenon of mindfulness cannot be described in a simple cause and effect realist approach (Braun & Clarke, 2006). Shapiro and Carlson (2017) believe, “Attempting to write about mindfulness in an academic and conceptual way is in some way antithetical to the very nature of mindfulness which is essentially an experiential process” (p. 9). The constructionist epistemology acknowledges that the participants learn about mindfulness by making meaning of their experiences, meaning which is influenced not only by new information, but how that information relates to prior experience, experience of others, and an evolving perspective (Creswell, 2014). After identifying themes through inductive analysis, the PI turned to a deductive process to report evidence of corroboration with the repeated measure questionnaire.

### **Institutional Review Board Approval**

Application was made to the NCSU Institutional Review Board (IRB) requesting permission to carry out this study on human subjects and outlining the measures that would be taken to protect them physically and emotionally, as it relates to their identities. The IRB granted the study exempt status with permission to proceed as detailed in the application (see Appendix K).

## **Recruitment and Location**

The recruitment flyers were placed throughout Cabarrus College of Health Sciences advertising the course, IHS 350 Mindfulness for Self-Care and the opportunity to participate in the related research study. Emails to the student body, faculty, and staff, as well as social media announcements were sent announcing the new course and study. Faculty members also informed students of the course availability during registration advising sessions. The principle investigator (PI) guest lectured on mindfulness to an OTA class and provided a one-hour PowerPoint presentation to 45 faculty members at the monthly faculty development session. The course and study were carried out in the Spring 2018 semester in room 236 of the college.

## **Participants**

As mentioned earlier, due to scheduling, the first offering of the course could only logistically fit the OTA students' and faculty schedules. It was also added to the college catalog in late October of the 2017 Fall semester, leaving a short window of time for students to learn about the course and register. Six students, five females and one male, registered for the course. Three were first-year OTA students and three were faculty members. The one male student withdrew from the course after the second week citing scheduling difficulties. The instructor already had access to demographic information of age, degree program and year, and prior education. To cater the course to learner needs and understand the impact prior mindfulness experience may have on the course outcomes, students were asked to complete a brief demographic questionnaire during the first class meeting (see Appendix L). These variables are not the intended focus of the study but provide context to the outcomes and inform future research questions; and are therefore, worth noting in Table 3.4.

Table 3.4	
<i>Demographics of Study Participants</i>	
Gender	5 females
Role	2 students 3 faculty members
Age	22 years – 62 years (mean = 43.4 years, median = 48 years)
Degree Program Enrolled In	2 Associate Degree (for credit) 2 non-degree (for credit) 1 audit (not for credit)
Prior Education	1 High School Diploma 1 Associate Degree 2 Master's Degree 1 Doctorate Degree
Prior Mindfulness Experience	1 “has little to no familiarity with it” 4 “have read and heard about it”

### **Procedure, Attendance, and Assignment Completion**

The class met weekly for 90 minutes for 15 weeks, and one weekend morning for the silent retreat. At the first meeting, all students were invited to participate in the study; and those interested, signed consent forms blinded to the PI. These were collected and held in another faculty member's locked file cabinet until all course grades were submitted to the registrar. Upon retrieval, it was confirmed that all 5 students consented to participate in the study. During the first and second to last meeting, all students completed the FFMQ, submitting them to the PI for scoring. Students were not aware of their scores on either questionnaire until after they had submitted their final papers and received their final course grade through the registrar's online system. This was to prevent anxiety, or an attitude of striving or competition related to scores, and to allow for an unbiased approach to the post-course questionnaire, the weekly assignments, and especially the midterm and final paper data sources. After grades were submitted, the PI emailed each student scanned copies of their T1 and T2 questionnaires, a detailed summary of their scores and changes, and an information sheet on understanding their scores and how to repeat the questionnaire in the

future if they choose. All students were also emailed a document with tips, recommendations, and resources for continuing their mindfulness practice after the class ended.

Of the 16 face-to-face meetings (15 classes and one silent retreat), one student attended all 16, two students attended 15, one student attended 14, and one student attended 10. Four students completed and submitted every assignment, while the one student who audited the class, submitted the final paper, but completed the others at her discretion. All five students actively participated in weekly discussions, in-class meditations, application activities, and the three-hour silent retreat.

### **Validity and Reliability**

**Repeated Measure.** Because two students entered the course a week late, and one was absent during the next to last class meeting, not all participants completed the FFMQ in the same way. Three completed the pre-test in class, while two completed it on their own. Four completed the post-test in class, while one completed it independently. Because of this variability, three students completed their T1 and T2 tests in different contexts. The FFMQ measures trait mindfulness, not state; but as with any self-assessment, variance in the context in which a student completes it, could influence her current opinion. Context, however does not only include location, but any factor such as a stressful day prior to taking the test, or a headache. With such a small sample size and absence of a control group, it is impossible to accurately report reliability. The FFMQ has good internal validity, but, again, because of the small sample size, validity across this study cannot be established. However, some meaningful anecdotal findings are shared as they corroborate the qualitative findings.

**Thematic analysis.** To establish reliability in my approach, I utilized a step by step coding and theme identification process common to the qualitative studies on mindfulness and healthcare students, discussed in the literature review. Per Creswell (2014), I developed clear definitions of the codes identified, and repeatedly compared the narrative data against them to ensure their meanings remained consistent and unique.

To establish the accuracy of the findings reported in a qualitative study, it is important for the investigator to utilize validity strategies (Creswell, 2014). One such strategy is the examination of multiple data sources when identifying common themes (Creswell, 2014). In this study, I used three narrative sources: the midterm paper, the final paper, and the insight I gained into the students' overall experience through facilitating the weekly discussions and reading their submitted assignments. I also attempted to validate the findings by describing the student's understanding of their experience through rich language, a strategy that helps the reader relate to the participants (Creswell, 2014).

Bias is a real risk in reporting qualitative findings because the investigator is typically closely involved with the participants throughout the study, and like in this case, often serves in multiple roles; instructor, group facilitator, and researcher (Creswell, 2014). An effective strategy to establish validity is for the researcher to openly discuss the bias she brings to the work (Creswell, 2014). As far as interpreting the findings, my purpose from the beginning has been one of inquiry and service. I wanted to develop a course to help healthcare students recognize the importance of self-care and provide an opportunity for them to learn and experience mindfulness as an effective form of and tool for self-care. If the course was not demonstrating success in this, I would be the first to recognize it and the first to want to implement changes. I would have no motive to skew the findings one way or the other, as

the passing of my thesis is not based on my research questions being answered in a positive way, but on whether I conducted the research with due diligence.

As a new instructor in higher education, I naturally want students to have a positive experience in my class. To avoid the risk of such a bias influencing me to give higher, undeserved grades to the students, which could ultimately influence how they reported their overall experience in the data sources, I strategically designed the assessments to be more objective in the heavily weighted items. For example, the quizzes, which counted 20%, required no grading on my part; and the final paper (25%) was graded against a rubric. The 15% weighted assignments were, for the most part, graded for completion and evidence of reflection, as each student entered the course at a different level and with different needs, making a standard unnecessary. The course was designed for exposure and exploration of mindfulness. I believe my grading formula that rewarded consistent effort, combined with the open discussion and extensive feedback I provided for each assignment, gave students the freedom to explore and reflect honestly, and motivated them to take responsibility for their learning and performance. In the few instances of work being submitted late, I deducted points per the college policy.

Another way validity is established for the overall project, is through my discussion of instances where the findings run counter to the themes, and when the quantitative data moved in a negative direction. Recognizing and sharing these inconsistencies with the reader, makes the report more accurate and realistic. (Creswell, 2014). Lastly, I spent a great deal of time with the participants through weekly face-to-face class interactions, online discussions, and reading and providing feedback to their written assignments. Such exposure deepens the investigator's understanding of the participants' experience with the

phenomenon, giving her interpretation and report of the findings authenticity and credibility (Creswell, 2014).

### **Chapter Summary**

This chapter describes in detail the methodologies used to carry out the dual purpose of this project: designing a course and studying student experience. Both collectively respond to the American Occupational Therapy Association's 2025 Vision that challenges the profession to identify and impart effective solutions toward maximizing health, well-being, and quality of life for people and their communities (AOTA, 2017); and Pizzi & Richards' (2017) call for a shift in the focus of OT education and research from one that emphasizes performance, to one that prioritizes participation in daily life and connects that participation to overall well-being.

The course and study designs are independently informed by theories and procedures from the fields of psychology and education. The course development was guided by Shapiro, et al.'s (2006) Mechanisms of Mindfulness (IAA) model, which describes the interaction between intention, attention, and attitude; the learning concepts embodied knowledge and reflection; and the fundamental components of instructional design as discussed in Morrison, et al. (2013). Each step of the course design process is outlined from inception, to identification of the educational problem, required texts, learning objectives, and strategies, to evaluation of the outcomes. Several figures and tables illustrate key concepts.

The study reflects the population health model of healthcare and is based on an elementary convergent parallel mixed-methods design. The Five-Facet Mindfulness Questionnaire was used as a repeated measure to assess change in trait mindfulness from pre-

course to post-course. Thematic analysis was used to evaluate the student's reflective writings toward identifying themes common to their experience. Justification for choosing the tools of measurement and the author's efforts toward establishing reliability and validity are highlighted.

## CHAPTER FOUR

### DISCUSSION OF THE FINDINGS

#### Quantitative Findings

As stated earlier, a sample size of five participants and the lack of a control group prevent the reporting of any statistically significant quantitative findings. However, the individual participant's scores on the pre- and post-course questionnaires are important as they illustrate the variability in how mindfulness is constructed in individuals. These scores are found in Table 4.1. Participants were randomly assigned subject numbers to protect their identity.

	Subject 1		Subject 2		Subject 3		Subject 4		Subject 5	
<b>Observe</b>		$\Delta$								
T1	19(2.4)		25(3.1)		25(3.1)		28(3.5)		38(4.8)	
T2	32(4.0)	1.6	37(4.6)	1.5	25(3.1)	0	36(4.5)	1.0	37(4.6)	(.2)
<b>Describe</b>										
T1	28(3.5)		18(2.3)		26(3.3)		28(3.5)		33(4.1)	
T2	35(4.4)	.90	29(3.6)	1.3	25(3.1)	(.2)	39(4.9)	1.4	32(4.0)	(.1)
<b>Act with Awareness</b>										
T1	14(1.8)		20(2.5)		25(3.1)		29(3.6)		34(4.3)	
T2	29(3.6)	1.8	34(4.3)	1.8	24(3.0)	(.1)	35(4.4)	.8	29(3.6)	(.7)
<b>Non-judge</b>										
T1	33(4.1)		24(3.0)		22(2.8)		28(3.5)		29(3.6)	
T2	35(4.4)	.30	35(4.4)	1.4	37(4.6)	1.8	35(4.4)	.9	28(3.5)	(.1)
<b>Non-react</b>										
T1	17(2.4)		17(2.4)		26(3.7)		23(3.3)		27(3.9)	
T2	25(3.5)	1.2	28(4.0)	1.6	25(3.6)	(.1)	31(4.4)	1.1	26(3.7)	(.2)
<b>Overall</b>										
T1	111(2.8)		104(2.7)		124(3.2)		136(3.5)		161(4.1)	
T2	156(4.0)	1.2	163(4.2)	1.5	136(3.5)	.3	176(4.5)	1.0	152(3.9)	(.2)

Notes: Raw score reported first, followed by mean in ( ).  $\Delta$ = change in mean

Four of the participants self-reported an overall increase in trait mindfulness at the end of the course. Three experienced an increase in all five elements ranging from two

points to 15 points (of 35-40 possible points per element), while one remained stable or noted a one-point decrease in three elements and a dramatic increase (15 points) in a fifth. The remaining student reported a one-point decrease in four elements and a five-point decrease in a fifth, resulting in an overall decrease of nine points.

Each of the seven or eight items in the elements are scored from one to five, thus the mean represents where the participant's score falls in that scale. The change in mean score better illustrates the change in trait mindfulness than the raw point scores. The four students who experienced an overall increase in trait mindfulness reported an overall change in mean ranging from .3 to 1.5. This is the difference between 3 of 5 and 3.5 of 5 on the scale or 3 of 5 and 4.5 of 5. Subject five, one of the four who reported having heard and read about mindfulness before the course, reported a negative overall mean change of .2. The change could be due to subject five self-scoring much higher (161) than the average (127.2) on the pre-test, and then appraising her level of mindfulness more realistically and thus lower after the course. A similar result was noted by Moore (2008) in evaluating mindfulness in Psychology students using the Kentucky Inventory of Mindfulness Skills (KIMS), a questionnaire that measure four of the same elements as the FFMQ absent Non-react.

This concept relates to the new research discussed earlier as to whether the FFMQ evaluates non-meditators and meditators the same, especially in the observing element (Gu, et al., 2016). Because all the elements are interrelated, inconsistency in the observing score could impact the remaining facets, and thus the overall score. In this case, subject five's observing score decreased one point from pre- to post test, perhaps informing her other scores similarly. Participants did not score their questionnaires, nor were they allowed to keep a copy during the course. This was to reduce the risk of the first score influencing the

second or the change in scores informing the final paper content. In blinding the students to their scores, I hoped to maximize the unbiased authenticity of their reflections. On the pre-test, subject five self-scored 19 and 20 points higher than the lowest self-scorer in Observe and Act with Awareness, respectively. On the post-test her Observe score was equal or within five points of three participants and 12 points of another; while her Act with Awareness score fell right in the middle of the other participant scores. Although there is no way to completely understand the variation in scoring in this small sample size, it does seem to reflect the argument that as one becomes more aware, they become more aware of their unawareness.

Regarding the individual elements of mindfulness, two students experienced the greatest change in “act with awareness”, one in “non-judge” and one in “describe”. The element with the greatest overall change across all students was Non-judge, followed by Observe, but the collective Non-judge score was heavily influenced by subject three’s dramatic increase. Subject three self-reported no change in her Observe score and a one-point decrease in the other three elements. Again, the reason is impossible to pin point, but it could be related to subject three becoming more aware and therefore more realistic in her scoring as described above; or it could be related to the substantial positive change she noted in the Non-judge element. This student paid a lot of attention to trying to understand how she embodied this element over the course of the semester, which came through in her final writings. I believe it is possible that experiencing such a dramatic change in one area may be the area she was ready for growth in at this time, leaving the other areas more stable. It is also possible that the limited one through five-point choices on the FFMQ lack the sensitivity to accurately capture stability or subtle changes, as all the negative changes experienced by

subjects three and five were one point, except one; while all of the positive changes experienced by the other subjects averaged nine points with 75% of those being equal to or greater than nine. Moore (2008) noted this as well in his use of the KIMS, suggesting that the tool, "...was not sensitive to the amount of change experienced by participants" (p. 336).

There is no evidence of a pattern indicating a greater change occurred in an item that was scored much lower or higher than average. There does not appear to be any relationship between the level of prior mindfulness experience and changes in specific elements. What does seem evident is that each student experienced change in their own unique way, made possible by the convergence of prior experience, practice, interpretation, and application. This is the beauty of mindfulness. It meets people where they are and keeps meeting them as their understanding evolves.

### **Qualitative Findings**

To grasp the students' experience as it relates to understanding and applying mindfulness to everyday life and understanding and practicing good self-care, they were asked to respond to six prompts, two at the midterm, and four at the final.

#### Midterm

1. In a minimum of 250 words, discuss what the poem, *The Guest House* by Rumi, means to you, and how it relates to your understanding and practice of mindfulness.
2. In a minimum of 300 words, discuss any changes you have noticed in yourself and your awareness and practice of self-care since the beginning of the course. Discuss which aspects of mindfulness you find the most helpful and why. Include any barriers or challenges you may be experiencing.

## Final

1. How has your understanding of mindfulness and the integration of it into your daily life changed over the length of this course, and how has this affected you?
2. How has your understanding of self-care and your own self-care habits changed over the length of this course, and how has this affected you?
3. What aspects of the course have contributed the most toward these changes?
4. How do you see yourself continuing the practice of mindfulness in your personal and/or professional life?

Through collective analysis of the students' midterm and final papers, five themes were identified as representing the essence of the students' experience, four with sub themes: 1) A window through which to see and understand myself – a) realizations about self, b) my habits may not be serving me well, and c) liberation and empowerment; 2) Permission and a constant reminder to - a) care for myself, b) be open to the world around me, and c) engage in the present moment; 3) A multipurpose tool for - a) improving my physical and mental health, b) managing my thoughts, feelings, emotions, and behavior, and c) managing my life and relationships; 4) A challenging but important practice to continue for well-being; and 5) Contributions to learning – a) foundations, b) community, and c) assigned readings. These themes not only reflect the outcome of the study but provide evidence that the students achieved the learning outcomes established for the course.

## Themes and Supporting Excerpts

**1) A window through which to see and understand myself.** All the participants shared instances where they gained insight into self, the majority of which seemed to come as a surprise or an ah ha moment. The journey toward these realizations appears to have been launched by a variety of learning experiences: reflection on the assigned text, informal practice of one of the seven attitudes, formal meditation, attention to emotional and bodily reactions, and intention toward self-care. These excerpts reflect the achievement of the SLO, “Utilize the practice of mindfulness toward assessing and improving personal self-care habits”. This theme is central to the art of self-care, reflecting Foucault’s belief that caring for oneself requires knowing oneself (Markula, 2004; Robinson, n.d.)

*a) realizations about self.* Students embraced the opportunity to examine themselves under the light of mindfulness and were sometimes surprised by what they saw.

- Since beginning the course, I have noticed that I am a lot more aware of my thoughts than before. I realize that I think all the time and it can be very difficult to stop thinking.
- I have become more aware and concerned about what I am doing to myself within my role. I do not like what I have observed when it comes to anxiety and body reactions. I now notice my lack of deep breath support and the level of stress I am under at work. Before I was not as aware of what was evolving within my cellular structure.
- One of the articles we read for class had a side bar that said, “Mindful Reminder: Can you tap into the deep and abiding awareness inside of you that is always present?” (Shaprio and Carlson, page 17, 2017) My answer to this

is, “Yes.”, I can tap into this awareness but is that not judgmental? Can I trust this awareness? I do not think that this awareness has always led me well. I am experiencing resistance to change and fear of change. I fear depression as I have watched my loved ones struggle with their feelings. I know what it is to walk the dark night and I do not need the big dog to bite me in the butt. I chose to be happy every day and sometimes this means ignoring sadness or it can overwhelm me. As I continue to deeply explore this material I find that the biggest challenge I am facing is my fear of negative thought.

- Through reflection upon the non-judging attitude, I have realized how rigid I have always been on myself.
- Before establishing a daily practice, the constant thoughts inside my head seemed to frequently be judging my own behaviors as either good or bad and this impacted my attitude and mood throughout the day and impacted my communication and relationships with others.
- I already felt like I was intentional and had a great attitude, however, I needed to be honest about paying attention. I find that I get distracted easily. I know that I am an overthinker, but I never really paid attention to how many thoughts my mind would get bombarded with during the course of a day.
- However, I found the attitude of mindfulness most difficult to honestly address was non-judging. I realized that I would hold myself to a higher standard than others.

- I found this so helpful! It unlocked the door to the origin of my stressors. I learned that I get very stressed out if my dependability and reliability is in question.
- I prefer the structure of the technique provided through an instructor and or tape because of providing structure for others five days a week I find it very nurturing to myself to be provided with structure from an external source.
- First, I realized that my intention was to be mindful but I was not contributing the required attention to my practice by consistently setting aside time to practice each day. This new-found awareness made me realize what I had been missing before taking the course

*b) my habits may not be serving me well.* Some students realized that the static view of self that had always made them feel safe or comfortable, was not serving them from a self-care perspective; and may have been creating additional stress.

- I have always been the one who puts others before I put myself. It is just who I am. I always tend to overcommit or put too much on my plate to try to make everyone happy. I know that is seemingly impossible, but to make someone else happy is what makes me happy. Or so I thought.
- Initially I thought I knew and had a clear definition of what self-care meant. I thought that I took very good care of myself by eating well, sleeping 8 hours a night whenever possible, following good sleep habits and routines, taking a walking break every hour from my computer, exercising at least twice a week, keeping my weight under control, not smoking or drinking in excess, and getting an occasional massage. As the course progressed so did my definition

of self-care. I realized that my initial understanding of self-care was superficial and did not encompass a mindfulness training emphasis. At best my personal self-care had a health promotion emphasis, but not a holistic self-care view.

- Although I am kind, respectful and loving to others, I've learned that I can be unkind to myself when I get caught in a cycle of self-judging.
- I learned early in this course that the practice of mindfulness does not consist of just smiling and telling yourself not to "stress out".

*c) liberation and empowerment.* Many of the participants expressed feeling liberated and empowered by the new knowledge they gained into self; a knowing that inspired them to make changes in attitudes and habits.

- I need not fear negative thoughts or emotions or change. I can let the feelings in and I can let them go. I can breathe in what I need to for my fullest experience and choose to let change come and embrace change.
- Initially I identified most with having a goal of self-exploration for this course. Shapiro in a 1992 study found "that as meditators continued to practice their intentions shifted along a continuum from self-regulation to self-exploration and finally to self-liberation and selfless service." At this point in time I feel ready to have my intention be self-liberation, but I do not believe that I will ever be capable of selfless service.
- I have had a slow and steady evolution with my awareness of when and how I engage in selfing. First, I had to learn what selfing was and then to identify when I thought I was doing it. My second step was to see what contexts I was

engaging in selfing and with whom. I made myself aware of when I was just doing this internally with myself, with family members, friends, students, colleagues at work, and with my small weekly group through this course work.

**2) Permission and a constant reminder to...** The idea of mindfulness granting a sort of permission, freedom, or liberation to engage on a different level, was present across all the narratives. This theme was coupled with the belief that mindfulness also serves as a constant reminder to act on this freedom. As a facilitator, I watched this combination develop over the semester as the students became more comfortable with taking risks through trying new forms of meditation, practicing new skills in their daily interactions, and sharing on a more personal level in group. The interesting thing about this theme is that if the students had been asked if they felt contained or restricted in their interactions, care for self, or ability to experience life, before the course, they probably would have said, “no”. Through the awareness that comes from daily practice, they realized the restrictions they had or allowed society to place on them and began to want to function outside of these parameters. These excerpts reflect the achievement of the SLOs, “Recognize the value of self-care for wellness and prevention of burnout in healthcare professionals”, “Utilize the practice of mindfulness toward assessing and improving personal self-care habits”, and “Apply the precepts and attitudes of mindfulness to everyday life”

*a) ...care for myself.* As described in the first theme, students recognized that they may have not been attending to self-care or had a less than full understanding of what that means; but here, they went one step further to recognize it is OK to prioritize this act. Their

comments also reflect Foucault's (1998) suggestion that the knowing that comes from caring for the self is actually the goal of self-care.

- This class has made me realize that taking care of myself, including my mind, is just as important, if not more important, than anything else I do in this life.
- It sounds simple, but I think as a healthcare professional, it is easy to get into a habit of worrying and caring for others. If I take care of myself, I can be more present for others and during my life experiences, which is what life is all about.
- It was rare that I would ever do anything for myself or treat myself because I was so caught up in everyday life; I forgot about the little things that have the potential to make the biggest difference. Saying “no” to someone has always been hard for me; but with the help of our assigned readings and informal practice that we were to complete with no one else around, I finally felt a calming sense of well-being that I was not use to.
- I think the hardest thing to realize is our own negative narrative. However, the practice of loving meditation has opened my eyes to the beauty of self-compassion.
- Throughout our weekly informal practice is where I was really able to incorporate “me time” and focus on what I seem to struggle with the most, mindfulness for self-care.
- We have to treat ourselves with kindness and compassion before we are able to treat others, including future patients, with the same respect and care.

- This class has taught me that taking the time to care for my own well-being directly impacts my ability to be present and enjoy my daily life experiences and my ability to be present for those I interact with and care about.
- I realized the connection with body scanning and self-care. If we pay attention to the sights, sounds, and feelings of our bodies, we will recognize when we are getting stressed, uncomfortable, or overwhelmed.
- My awareness of my own practices of self-care has heightened. In the past, I felt like I was being lazy if I took 30 minutes to stretch or meditate. Taking a long walk, then stopping to listen to the sounds of the leaves crackling underfoot, or an acorn bouncing off a branch seemed frivolous.
- This course provided me with the structure I needed to learn about a large body of material and at the time demonstrate compassion to myself when I was tired or when my assignments were not turned in with perfect APA format. I made conscious decisions that what I had accomplished was enough and that was good self-care for myself.
- To be given permission to approach the practice of mindfulness with a beginner's mind opened the door to honest learning.
- I will continue to let go of things that don't enhance my health and wellness to make room for activities that do.

*b) ...be open to the world around me.* Students described how mindfulness allows and encourages them to take in all the sensations the world has to offer, good, bad, happy, sad, comfortable, and painful; and not only acknowledge them, but feel gratitude for them. These comments reflect an understanding of the destructive mind states described in chapter

one that encourage us to cling to and constantly desire good feelings, flee from and avoid bad feelings, or believe our own version of reality. These reflections also demonstrate an understanding of the connection between mindfulness and gratefulness (heartfulness).

- I have learned that being mindful of your surroundings will give you a different view on life as a whole.
- One guest should not be treated differently than another just like one emotion, thought, or feeling should not be treated differently than another. You should acknowledge all the thoughts that may arise and accept them without judgment of what or why they are there. Accepting your thoughts as thoughts and not who you are as a person can help you to be accepting and at peace with your life the way it is moment by moment.
- The formal and informal meditation practices have been great tools that have changed my perspective by looking at life events with a “beginner’s mind.”
- Simple practices can have such a huge impact on our mental health; cleaning, going for a walk without technology, washing dishes, doing laundry, exercising, or my newly discovered favorite...driving my car with no radio on just to listen to all of the sounds the world that surrounds us has to offer. I have noticed that I pay more attention to small things around me that I am so thankful for and blessed to have.
- By remembering that there is a purpose for each experience, even if I don’t understand it at that moment, it will help me to feel a sense of gratitude in my life. I think understanding this will help me to be more at peace with my thoughts and feelings as they arise and help me to more easily let them go.

- Mindfulness is a holistic way of living.
- The poem The Guest House (Rumi) means to be open and accepting of new and all feelings, ideas, and life adventures that come my way whether planned and expected or unexpected. Acknowledgement does not necessarily mean I will be more peaceful or more joyful it means I will experience life more fully. I need not fear negative thoughts and emotions or change.
- I have found that feeling grateful for my life, experiences, and people I am surrounded by adds so much value to the quality of my life.
- I've learned to lean into the discomfort a bit – that's one of the best things you taught me, Katrina.

*c) ...engage in the present moment.* Participants wrote about their transition from rushing through moments or wishing them away, to truly engaging in the moment without wanting to change it. These thoughts demonstrate that they recognize how worrying about things that have already happened, ruminating the same thoughts, or feeling anxiety about the future, interfere with their ability to experience the present.

- Mindfulness is the practice of paying attention to your body, thoughts and feelings. It is being in the moment and knowing that you are working with your authentic self and soul.
- “Mindfulness reminds us that it is possible to shift from a *doing mode* to a *being mode* through the application of attention and awareness” (Kabat-Zinn, 2012, p.18).
- I can enjoy moments and experiences more fully than I was able to before through being present with each moment as it arises.

- I learned that the practice of mindfulness is a conscious decision to intentionally live life differently.
- I have experienced two major changes throughout the semester - an awareness of the present and living life in the moment and growth in my ability to meditate for a longer period of time. When interacting with others, an awareness kicks in and I consciously tell myself to stop, pay attention, and be present. I'm able to more fully give focused attention to the conversation or activity or to the person who is in front of me while reminding myself that it's important. I've always said that people are more important than things but often was only partially engaged. Now I'm able to show that people are more important and I think it's showing more respect for them as well as giving myself permission to put other thoughts and intentions aside and focus on one thing. As far as sustaining a meditative state for a longer period of time, I think it became easier because I was more in control of myself – my brain. It's true that it is a practice and one becomes better with practice. But it wasn't as hard as it was when I tried to practice several years ago. I would think I had spent 20 minutes only to realize maybe 5 minutes had passed by! Now, I get lost and truly get in the *zone*.
- Allowing myself to truly be in the moment and pay attention to what is happening around me, will bring joy to my heart.
- I know that with continued practice that I will be able to “engage wholeheartedly” to enjoy my life fully no matter what the situation, including the “possible and not yet realized” (Kabat-Zinn, 2016, p. 120).

- If I had gathered one thing from the practice of mindfulness, it is that suffering comes from trying to change something that already is.

**3) A multipurpose tool for...** Over the length of the course, the students recognized that mindfulness is a valuable tool that has multiple applications. Their narratives reflect they view it as an important resource for self-improvement, self-management, and management of relationships and sticky situations. These excerpts reflect the achievement of the SLOs, “Discover the positive relationship between systematic and routine mindfulness practice and self-regulation”, “Examine the synergetic relationship between mindfulness and self-compassion and their functions in reducing suffering”, and “Employ embodied learning strategies toward increasing awareness, knowing, and overall well-being”.

*a) ...improving my physical and mental health.* Students recognized both physical and mental health changes in themselves as a result of paying attention, approaching activities through a mindful attitude, and engaging in specific formal practices.

- Body scan is also something that I like to do when I have more time so I can focus my full undivided attention on each part of my body, helping to become more grounded.
- I am learning to be intentional and pay attention to my attitude as I approach my days. I am exploring new techniques to use that will help me slow my mind down and reduce ruminating thoughts. Being aware of my distracting thoughts help reduce my stress.
- Since practicing informally while participating in routine self-care activities, I feel much more happy and calm and I have found a new sense of enjoyment for doing daily “chores”.

- Informally practicing during self-care routines has made me physically feel better because I know I am taking care of myself.
- After reviewing my completed *Self-Care Inventory* and comparing the results from before I took this class and after, I think I have improved the most in the areas of physical, psychological, and spiritual self-care. I take more time to take care of my body, mind, and spirit.

The connection to my body and health has grown as yoga has become present in my life.

- Physically, my body is stronger from doing yoga – I’ve found that I love it not only for the peace it gives my mind, but it’s very empowering. I feel stronger. I’m quite pleased with myself when I can stretch a little more and sink into a pose a little deeper.
- Before this class, I tried yoga out a time or two but never felt nearly as connected as I do now, in my mind, body and soul. It is amazing all of the benefits that I have found from something that seems so simple, but can be so complex.
- Yoga has given me a feeling of strength, both mentally and physically, and it has also broadened my horizon by making me think outside of the box. I could already tell a difference in my muscles and bones within the first week. Not to mention, it gave me mental clarity and prepared me for my day.
- Building consistency with mindfulness practice has had a major positive impact on my life. I feel like I am better able to focus, have less anxiety,

increased calmness, improved communication skills, and overall improved self-care habits.

- I was encouraged by the thought of having “tools” to achieve peace.

***b) ...managing my thoughts, feelings, emotions, and behavior.*** Students found skills in self-regulation as a result of practicing mindfulness. This change reflects understanding and application of the seven fundamental attitudes of mindfulness in daily life; non-judging, patience, beginner’s mind, trust, non-striving, acceptance, and letting go.

- Life is harder to manage when we use up energy brooding over “would haves, could haves, and should haves”. We can react poorly to uncomfortable situations, but that usually ends up complicating the original challenge. A poor reaction is like opening another can of worms! It’s just more that we have to clean up!
- I have found myself incorporating multiple mini meditations into my daily routine and they have really helped in times of stress and anxiety. I use deep breathing a lot because it is a quick “pick me up” when I need to re-focus my thoughts, as well as “STOP”.
- Lastly, my all time favorite has to be the 5 senses mediation walk. This meditation really helps me clear my head and/or just reminds me how thankful I am for everything that I have and the beautiful world that God provided us to live in.
- There is beauty, strength, and freedom in acknowledging your thoughts and feelings, then letting them go.

- Mindfulness has taught me that it is better to pause and respond appropriately to stress, rather than to quickly react to stress as our primitive, protective instincts encourage us to do.
- I also have been very interested in the number of times per day I watch myself build my own self esteem or “selfing” (Enjoyment and the Quality of Life, page 57) and how I do it. Now when I find myself mentioning me or my accomplishments out loud in certain situations I stop myself. I ask internally why and if I need to do this at that time. I love the patterns I am changing. I also have watched others as they do this and am continuing to learn a lot.
- Now that I am aware of the non-judging attitude, I can acknowledge thoughts that I have without judgement as to whether they are good or bad or at least catch myself and move on quickly when I begin to do so. For me, having a generally non-judging attitude has had an impact on all the other mindful attitudes and most importantly helps me to be a more positive person, lessening the “delusion and the trap of self-fulfilling prophecies”, thus producing more and more positive thoughts, emotions, and experiences (Kabat-Zinn, 2016, p. 113).
- Through the readings, assignments, and practices in this course I now realize that having the ability to accept my thoughts as thoughts and not who I am as a person can support me to be more accepting of myself and at peace with my life the way it is moment by moment. I feel more confident in myself and trust myself more than I did before.

- Through this course, I was able to understand the origin of my stressors. I am more mindful about accepting things as they are and letting go of imperfect situations or unrealistic expectations.
- This course has taught me to not get stuck in a stress-reaction cycle (Kabat-Zinn, 2013, p. 334). I am discovering ways to mindfully respond to stressors in my life, not negatively react to them. I've noticed the tension in my shoulders and the tightness in my chest have dissipated since I have learned to accept and let go of circumstances that are happening anyway.
- I'm someone who is sought out for advice and counseling from friends, family, and colleagues so I know I've been somewhat a decent listener – or else people wouldn't continue to seek me out, right? But I think I've become much better at it. I'm not as quick to react but take more time before responding or sharing my point of view.
- The first mindfulness technique that I have found exceptionally helpful in this training is to acknowledge and identify that I am having a specific feeling and thought. After I identify the feeling and let the feeling in I then try to let the feeling and thought go without judgement. For example, I woke up on Saturday night with anxiety about the time needed to write this paper. Instead of lying in bed and fretting I got up and started to write the paper. I noted that I was anxious and said to myself, "You are anxious, and do not feel that you are an organized writer. Now let the feeling in and let it go." I did this and started to write. I found it very helpful to have just accepted myself and to have flowed with my new learning.

- I've benefited from the single nostril breathing tool that can summon my parasympathetic system. I have utilized this quick meditation to center myself prior to handling a potentially volatile emotional engagement with a family member.

*c) ...managing my life and relationships.* The students found that mindfulness enhanced their ability to manage their daily schedules, work/life balance, and interaction with others. Positive changes in these areas demonstrate application of the seven attitudes and an understanding of the concept, adventitious suffering, described in chapter one. A person may bring this additional suffering upon themselves by reacting to a situation poorly, ignoring cues for needed self-care, or creating false narratives about an interaction.

- I like to remain joyful and reduce my stress level as much as humanly possible. However, just wishing the stress away isn't enough. Mindfulness has helped me view my tendencies to over-schedule, over-commit, and self-judge as prime triggers for stress and suffering.
- It has really made me take a step back and reflect on the way I would handle things before when I was stressed out trying to please everyone versus now, going about a situation with a clear mindful attitude.
- The practice of mindfulness has improved my relationships by being intentional about acceptance and letting go.
- The biggest change I have experienced through this course is the exposure I have had to so many different techniques and ways to approach a variety of daily situations in my life.

- One of the things that has changed (and I still have a lot of changing to do) is that I am becoming more realistic with what I have the time to accomplish. I'm becoming better at making choices and prioritizing and this also gives me a better sense of when I need to say "no" to something when asked to take on something new and also to bless and release things that I don't have time to do and accomplish.
- I plan to continue to work on being more mindful in relationships and in communications with others. I also plan to continue to work on being more mindful at work to include taking breaks, being assertive with discussing needs, setting limits, and balancing the workload so that I don't get to a point where I feel like it is "too much".

**4) A challenging but important practice to continue for well-being.** Jon Kabat-Zinn (2016) declared mindfulness the "hardest work in the world", reminding us that, "No one can take on that work for us" (p. 14). Throughout the semester, students encountered aspects of learning about mindfulness that were challenging, and at times, even stressful. Through sustained practice, a desire to explore, and the common humanity they shared with the small group, they found ways to overcome and see value in even the difficult course components. All the students recognized the immediate and long-term benefits of practicing mindfulness and discussed their intentions to continue after the course closed. These excerpts reflect the achievement of the SLO, "Recognize the value of self-care for wellness and prevention of burnout in healthcare professionals", "Utilize the practice of mindfulness toward assessing and improving personal self-care habits", and "Employ embodied learning strategies toward increasing awareness, knowing, and overall well-being".

- About halfway through the semester, I felt like I was struggling with maintaining the consistency of the practice and even felt like I was overthinking in relation to my thoughts, emotions, and feelings more than I normally do. I began to get frustrated with myself because I felt like the dedicated practice wasn't benefiting me; however, with a positive attitude and sustained attention to maintaining the minimum practice requirements for the course, I slowly noticed positive changes in my mood, thinking, and overall wellbeing. I could complete the minimum daily formal practices and found myself wanting to do more. I realized that even though it is a choice you make, it is also a necessity for self-care and overall well-being.
- I think this has affected me in good and uncomfortable ways. I look forward to the second step and hope that another level of mindfulness training will be taught at Cabarrus College of Health Sciences, so I can continue this experiential process and growth.
- This class has been eye-opening, stimulating, and stressful. Well, to be fair, it was stressful in the beginning! However, now I've realized how helpful studying mindfulness has been as I've had to navigate through a challenging semester.
- Over the course of this semester, I have learned that self-mindfulness is the key to less stress and a happier life.
- In the beginning of the semester, forcing myself to stretch first thing in the morning was way out of my comfort zone and threw my normal routine off. However, once I practiced it a few times and started to incorporate it in my

routine rather than seeing it as an assignment or having to rush through it some days, I noticed a huge difference in the way that it made me feel. I felt more vibrant and alive, regardless of the amount of sleep that I got the night before.

- My [self-care] scores have increased; however, I still need improvement in the physical self-care area of my life. I find that the number one argument that keeps people from successful mindfulness practice is the complaint of lack of time. I am still trying to balance formal and informal mindfulness practice with my school and home life.
- Although I have noticed the many benefits of mindful self-care, I do feel that I still have room for further progress with being deliberate about my self-care routines as I still find myself slipping into hold habits. For example, I continue to find myself rushing through a meal or wanting to sleep-in and then rush through my morning routine to get to work on time.
- These benefits make me want to continue with a daily mindfulness practice from this point forward. I realize that I may miss some days of practice; however, with the teaching of the informal practices in this course, I know that I will be able to incorporate some type of mindfulness practice into my daily life.
- I will continue to be intentional about the practice of mindfulness, as I have seen how it has changed my life.
- I feel that I am actively engaging in both formal and informal mindfulness techniques and think I can sustain some of this practice.

- Yoga and guided meditations become more and more meaningful to me and I know that I will continue to use these on a weekly basis.
- I appear to embrace and reject new mindfulness patterns every day. I think about mindfulness techniques about four times an hour while at work, and inconsistently keep trying a form of practice to keep myself focused, productive, present, and attentive.
- Personally – I’ll keep doing yoga and meditating – these are my two favorite practices.

**5) Contributions to learning.** Each student identified a variety of course components that contributed to their learning. This demonstrates the importance of offering a multi-modal course design. These excerpts reflect the achievement of the SLOs, “Discover the positive relationship between systematic and routine mindfulness practice and self-regulation”, and “Relate research from other fields of study toward an ever-expanding understanding of mindfulness”.

*a) foundations.* Foundations represents the basic precepts and attitudes of mindfulness and the daily formal and informal practice discussed in chapter one. Students were introduced to these concepts during the first class; and every reading, assignment, and discussion gave them opportunity to apply them either in formal or informal practice. All five participants discussed the importance of these concepts in their understanding of and integration of mindfulness into self-care habits and daily life. This illustrates the importance of keeping a course grounded in the fundamentals of a mindfulness-based program as defined by Crane, et al. (2016). It also suggests that the daily required 10-15-minute formal practice and bi-weekly informal practice was adequate without being overburdening.

- The use of the formal and informal mindfulness practices taught in this course help me to become more aware of the thoughts and emotions I experience and how much they change throughout the day and over time.
- By completing a weekly log of formal and informal practices, I was able to keep in mind what I needed to be more attentive and/or aware of throughout that particular week. Without that log, I think I would have just gotten lost in all of the reading because there was so much information to be attained.
- I have always been more of a visual and interactive learner, so having assigned meditations to go along with our reading each week is what really drew me in.
- One of the most important aspects of the course was learning about the seven mindful attitudes: non-judging, patience, beginner's mind, trust, non-striving, acceptance, and letting go.
- As we began studying mindfulness, we were introduced to the *Tenants of Mindfulness Practice* – Intention, Attention and Attitude. I began approaching my everyday activities with these tenants in mind.
- I used these 7 mindful attitudes as a guideline to my formal and informal practice of mindfulness.
- I looked forward to the new practices that we were being introduced to, such as breathing meditations, morning stretch and body scanning. Learning new practices enhanced my ability to pay attention.

*b) community.* The students recognized the value of the small group. This group became important for asking questions, sharing experiences, and taking risks. Several reported it being something they looked forward to each week.

- From day one of this class, I felt like the weight of the world was lifted off of my shoulders. Just being able to sit down with others and hear their experiences while reflecting on my own was a sigh of relief.
- Reflecting on learning is important for me to assess what I've done or how I've performed and look at the lessons learned. Sharing reflections from our own journeys in class has been meaningful to me. I love learning communities, and this has been quite an intimate group of learners. It's been a pleasure to see how others are progressing on their own journeys and to receive support when I needed it for my own journey.
- I thoroughly enjoyed meeting each week to share all of our thoughts and experiences with one another. I looked forward to every class to see who was going to bring what to the table. I will certainly miss attending this class, but it will forever be with me wherever I shall go.

*c) assigned readings.* The students discussed that the readings provided them with a reference point to which they could make meaning of their practice experiences. These comments support the idea of exposing students to a variety of literary resources that they may find connection and make application to their own lives.

- When reading the stories of people who participated in the mindfulness-based stress reduction program by Kabat-Zinn (2013), it was clear that the consistency of practice was extremely important.

- I found one of our readings, *the anatomy of an emotional hijacking*, to be profound.
- Of course the reading has been an asset. I'm a person who reads and seeks out information when I'm learning about something and consume everything I can from a variety of resources.
- "Use your sleep imbalance as a vehicle for further growth" (Kabat-Zinn, 2013, page 476). These words have allowed me to try new patterns of learning and I have found that my body easily self regulates and that I get through the day with ease when I have not slept my usual eight hours.
- The stories from the book explained that you must set aside the time to practice whether you feel like it or not. This made me realize that I don't have any reasonable excuses to avoid daily practice and helped me to change my attention and attitude toward mindfulness.

### **Chapter Summary**

This chapter detailed and discussed the anecdotal results of the repeated measure, the Five-Facet Mindfulness Questionnaire, and the thematic analysis of the participants' reflective papers. The post-course questionnaire suggests that four of the five students experienced an overall increase in their level of mindfulness as compared to the start of the course. The fifth participant's subtle decrease in trait mindfulness score may be explained by the process of becoming more aware and therefore, more realistic in self-scoring.

From the reflections, five themes were identified as representing the essence of the students' experience, four with sub-themes: 1) A window through which to see and understand myself including realizations about self, recognition of habits, and liberation and

empowerment; 2) Permission and a constant reminder to care for self, be open to the world around, and engage in the present moment; 3) A multi-purpose tool for improving physical and mental health, managing thoughts, feelings, emotions, behavior, and relationships; 4) A challenging but important practice to continue for well-being; and 5) Contributions to learning including foundations, community, and assigned readings. The student's writings reflect a deeper and more integrated grasp of mindfulness as a state of mind, daily practice, and way of life, that evolved over the semester. Their writing also indicates a greater understanding of self-care, its value, and ways to make it a priority in their daily lives.

## CHAPTER FIVE

### CONCLUSION

#### Summary of the Project

As a prophylactic to the burnout epidemic among healthcare professionals and in support of the American Occupational Therapy Association's vision to emphasize health, well-being, and quality of life through participation (AOTA, 2017), the purpose of this thesis project was two-fold: to develop an introductory mindfulness course for academic credit that would be appropriate for healthcare students from all disciplines at all degree levels; and to study a student sample's response to the course. As discussed in chapter two, there is existing research in this area of interest, but the inquiries are collectively too broad and individually too eclectic to be applied to multiple settings and student populations where they can be replicated and affirmed. This problem seems to stem from the lack of a gold standard format for offering mindfulness training to healthcare students.

This project took on the task of simplifying the research questions to be in line with the desired outcomes of such a course. The desired outcomes were derived from the large body of knowledge indicating the positive impact mindfulness has on preventing and reducing burnout in healthcare professionals, and the identification of self-care (by healthcare workers) as the most effective tool for preventing compassion fatigue and its sequela of symptoms. Because of the numerous studies reporting positive effects from mindfulness training in health professionals using Jon Kabat-Zinn's Mindfulness-Based Stress Reduction program, a first-generation Mindfulness-Based Program (MBP), I chose to base my course on the core ingredients for an MBP as defined by Crane, et al. (2016).

Using the AOTA 2025 vision as a guiding framework, the methodology for the project is divided into two independent, yet related pieces: the course, and the study. The course design is based on Shapiro, et al.'s (2006) Mechanisms of Mindfulness (IAA) Model as well as the learning concepts, embodied knowledge and reflection; and guided by Morrison, et al.'s (2013) Fundamental Components of Instructional Design and Components of the Instructional Design Plan. The study design is steeped in a population health model, as described by Knickman and Kovner (2015); and utilizes an elementary convergent parallel mixed method design with a quantitative repeated measure questionnaire (FFMQ) and a qualitative thematic analysis of student writings.

The first offering of the course drew two students and three faculty members from various ages and degree levels. All were female and had similar limited exposure to formal mindfulness practice. Over the course of 16 weeks, the participants completed scholarly readings, highly experiential assignments, daily mindfulness practice, and quizzes, and participated in a weekly class meeting. Upon comparison of the pre-course and post-course FFMQ, four of the five students self-scored an increase in trait mindfulness. Thematic analysis of their writings revealed the students expanded their understanding of mindfulness and self-care, gained insight into themselves and their habits, began integrating both practices into their daily lives toward self-assessment, self-compassion, self-regulation, and self-improvement, and recognized the value of self-care in providing care for others. These themes provide evidence that the intent of the program was realized and that the students achieved the learning outcomes established for the course.

Even though the CCHS course evaluation did not serve as data for the study, it did serve as a summative evaluation of the course's effectiveness. The two student learning

outcomes I embedded in this general questionnaire matched to the two outcomes measured in the study: 1) utilize the practice of mindfulness toward assessing and improving personal self-care habits; and 2) apply the precepts and attitudes of mindfulness to everyday life. In responding to the survey's prompt to rate their level of competency in these two areas, 80% of the students selected "highly competent" and 20% selected "competent". These results further validate the quantitative and qualitative findings of the study.

### **Relevance of the Findings**

Although the findings are valuable, they are more relevant when viewed in light of the course design, as it was the intent of this project to produce an introductory MBP that would develop mindfulness and self-care skills in healthcare students. As discussed in chapter two, the first priority of such a course should be providing students with the opportunity to explore, experience, and understand mindfulness as both a systematic process and an embodied way of knowing. The second must be encouraging students to evaluate and implement positive changes in their self-care habits in an ongoing manner. I believe the methodical design of the course based on the findings of similar studies played an important role in the success of the course.

Through a palatable dose of daily practice and creative experiential assignments, students learned to pay attention, to welcome and express gratitude for sensations and experiences outside of their comfort zones, and to view themselves and their intentions as dynamic constructs versus fixed entities limited by their thoughts, emotions, and feelings. They began to embody awareness and a mindful attitude that allowed them to perceive and engage in life in a more realistic way, especially as it relates to their practice of self-care. Through relevant readings, private journaling, group discussion, and daily practice, the

students took risks, laughed with themselves and each other, and grew from their willingness to constantly reflect on and challenge their current understanding of mindfulness as a way of life and mindfulness as a practice and form of self-care. Through quizzes, often heavy readings, and group discussion, the students developed greater capacity for self-compassion, managing their workloads, managing their reactivity to stress, and recognizing the common humanity they have with the world. Through various meditations and group applications, the students identified ways to incorporate mind, body, and spirit into their self-care habits.

Through these gains in perspective, self-regulation, and self-compassion, each student learned to embrace the manner in which mindfulness training was landing on them as individuals and respect the way it was being experienced by others. Jon Kabat-Zinn (2016) wrote, “Ultimately, mindfulness can become an effortless, seamless element of our life, a way for our very being to express itself authentically, with integrity. In this regard, no one’s trajectory in cultivating mindfulness and the benefits that may come from it is the same as anyone else’s” (p. 14). This, perhaps, is the greatest accomplishment of the course, helping students to follow their own path, to get to know and take care of themselves while simultaneously acknowledging the needs of others. Gockel (2015) recognized the value in connecting self-care to clinical practice toward developing healthy clinicians who can effectively cope with the unique stressors associated with caring for others. I believe through this course, the participants laid important groundwork toward being able to sustain the practice of self-care as they enter or continue in the professional workforce as caregivers to people hurting from disease, physical insult, and emotional pain.

### **Limitations and Strengths of the Study**

There are several limitations to the study. However, upon reflection, these shortcomings can be viewed as strengths and assets: 1) to the course in meeting its objectives, and 2) to the study toward better understanding the students' experience. As previously discussed, the quantitative portion of the study was limited by the small sample size and lack of a control group, preventing the reporting of changes with statistical significance. In hindsight, this small group was a blessing. As an instructor new to higher education, it gave me room to breathe, time to closely monitor the students' reactions and adjust content and flow to accommodate their needs, time to provide thorough and meaningful oral and written feedback on their assignments, and space to fully immerse myself into the group experience. I believe, and this is supported by student feedback on the course evaluation, that my availability and involvement was an important factor in the course's success.

Shapiro and Hunker (2016) identified the value of instructors modelling mindfulness and healthy behaviors for their students in balancing workload and managing stress. While I was teaching the course, I was also enrolled in graduate coursework, composing this thesis document, and fulfilling my other professional and personal roles. This allowed me to relate to the stress the students were experiencing in their own coursework and lives and prompted me to deepen my own mindfulness practice toward making healthy choices and balancing work and rest. It is interesting that the time that I felt most at ease with this entire project was while I was teaching the course. This may have been because I really enjoy teaching; but I think it is more related to the fact that I was in community with my students weekly, challenging my own task master and striving tendencies and getting to know myself better,

and responding to stress and my own limitations with self-compassion and understanding. For future offerings, I plan to limit enrollment to no more than 10 students per section, unless I am able to recruit an additional instructor to facilitate the group discussion for students over this maximum.

My choice to not utilize a second reader or cross-checker for the thematic analysis could be viewed as a limitation to the study's reliability; but not in light of what I wanted to learn from the data. Braun and Clarke (2006) wrote, "What is important is that theoretical framework and methods match what the researcher wants to know, and that they acknowledge these decisions, and recognize them as decisions" (p. 80). In this case, I wanted to understand the students' experience with the course I designed and taught. It would be impossible for me to have recruited someone who could effectively code and identify the themes without the investment I had placed in the project and the time spent with the students. This was a new course and a new subject for the college. I believe inviting an additional reader without this knowledge could have interfered with my ability to accurately represent the students' experience. For validity sake, I considered carrying out member checks with a couple of the students, but out of respect for each participant's identity as it relates to their narratives, I decided against it.

A third limitation that turned into an asset was the convenience sample. As discussed, the class was added late in the Fall semester for Spring registration and only fit one program's course schedule. Because of this, only two students from that program completed the course, leaving room for three willing faculty members. At first, I was a bit intimidated by the idea of teaching a new course to faculty members, especially from different programs. I soon realized this was an enormous bonus. The variation in

demographics, i.e. age, program, and former education among the five participants, allowed me to see that the course could be effective for all adult ages, level of education, and disciplines. It also provided me with practice in grading the assignments up and down to meet the needs of the students. Lastly, it deepened my appreciation for the experience that every student, no matter what their background, brings to the learning process. Lindeman (1926) believed, "...the resource of highest value in adult education is the learner's experience", and that adult education should be more about "situations" and less about "subjects", (p. 8). The rich personal and professional experiences of the five participants, shared in writing and discussion, became the fabric of the course, offering challenges, comfort, and solutions to the group members.

Lastly and related to the previous limitation, the convenience sample was made up of people who were interested in studying mindfulness, thus possibly positively biasing the findings. However, this too, turned out to be of great benefit. As a new instructor teaching a new course, I realized the importance of having interested students. Understanding how people who are drawn to mindfulness responded to the course will help me be prepared for students who may not be as interested in future offerings.

## **Recommendations**

### **Future of this Course**

I believe this course simplified mindfulness education for healthcare students while maintaining the academic rigor required by their specific disciplines. I would ultimately like to see it taught and studied in other health professions programs to see if it has the capacity to be effectively transitioned into other colleges. It is scheduled to be offered again next Spring at CCHS; and work toward creating an online version and a second level should begin next

summer. I believe it is possible for the course to be taught online with small learning communities and live group discussion and am challenged to begin considering how to modify it for this format. The second level will hopefully be focused on teaching healthcare students to more directly integrate mindfulness into their professional interactions with patients and teammates, and even into their treatment plans.

### **Mandatory versus Elective**

I appreciate Halland, et al.'s (2015) findings that students who displayed higher levels of neuroticism benefited most from the course in both ability to cope and seek out support, and understand Erogul, et al.'s (2014) suggestion that mindfulness training should be made available to students who may not self-select. I would like to see the course become an approved elective for all the programs at CCHS. However, I do not think it should be made mandatory for any program. A key component of adult learning is having a readiness to learn (Knowles, 1970). When asking students to examine habits, thoughts, and feelings toward change, they need to be interested and at least somewhat willing, for their own growth and that of the other group members. I would like to be involved in helping other faculty subtly bring mindfulness into their current courses and activities toward helping students recognize its value, perhaps sparking an interest in studying it in depth.

### **Formal and Informal Practice Requirements**

This study's findings reveal important information about two course components that varied greatly in the literature: the amount of time required for formal practice, and the inclusion of a group discussion. Most of the authors in similar studies agreed that the 45 minute daily formal practice required by the traditional MBSR course, was too much for students enrolled in healthcare programs. The attempt to find the friction point between

adequate and overwhelming seemed to be a driving force behind many of the course designs. The findings of this study suggest that students are capable and willing to consistently carry out 10-15 minutes of formal practice on a daily basis and engage in informal practice at a minimum of two or more times per week. In reviewing the practice logs for the course, it was more common than not, that the students completed more formal practice than required and engaged in informal practice daily. I believe three factors influenced their practice: the structured format of the practice log, the grading of the log, and the accountability for discussion established by the group. I do not think most students will routinely practice beyond a nominal amount without these supports and expectations.

### **Group Process**

Many of the studies reviewed included a group discussion in various forms, but several did not provide this learning opportunity. I am convinced from personally experiencing MBSR as a participant, reviewing the literature, and teaching this course, the group process is paramount to mindfulness training. Lindeman (1926) believed adult education should be guided by the learner's needs and interests versus a scripted curriculum imposed by the teacher. The group process in this study was valuable in maintaining a student-centered focus, promoting a sense of community and support, and empowering participants toward transformation in their understanding of self and care of self. Mezirow (2012) defined transformative learning as

the process by which we transform our taken-for-granted frames of reference (meaning perspectives, habits of mind, mind-sets) to make them more inclusive, discriminating, open, emotionally capable of change, and reflective

so that they may generate beliefs and opinions that will prove more true or justified to guide action (p. 76).

He believed this type of learning, "...involves participation in constructive discourse to use the experience of others to assess reasons justifying these assumptions and making an action decision based on the resulting insight" (Mezirow, 2012, p. 76). The weekly group meeting in Mindfulness for Self-Care was the primary forum through which this essential reflective discourse was conducted.

### **Implications for Future Research**

To avoid re-creating the problem this study desired to address, I do not believe the focus or research questions of the course should be immediately expanded. Rather, it needs to be repeated with more students representing a variety of genders, disciplines, and educational preparedness, in a variety of settings. This would include studying the impact of an online version of the course and possibly comparing the two for efficacy and improvement. It would also be helpful to add a follow up interview at two times after the course ends to gauge how students are independently continuing the practice.

Once the course has a proven track record for effectively educating students on how to integrate the practice of mindfulness into their daily lives and self-care routines, the next step might be to develop and study the impact of a second level mindfulness course, as described earlier. The goal of such research might be to understand how individual students creatively integrate a mindful approach in their professional interactions and clinical interventions, how this affects them personally, and how their patients and peers respond to the approach.

Another area to explore might be Solhaugh, et al.'s (2016) interest in understanding why and how some students embody mindfulness at a deeper, frame of reference changing level, while others engage in it more superficially. Such research might also shed light on questions about the transforming nature of mindfulness and the relationship and timing between embodied learning toward embodied knowledge, and transformative learning. Can the two be distinguished in this context? Is the insight into self that awareness often brings, actually a form of disorienting dilemma that sets the stage for transformative learning? Or do some students experience a disorienting dilemma that causes them to seek out and engage in mindfulness practice in attempt to re-orient?

The research with students and mindfulness is promising, suggesting that it may be effective in assuaging the stress and anxiety commonly associated with healthcare education, and reducing the risk of students experiencing burnout before and after they enter the workforce. More studies are needed to confirm these suggestions and identify practical ways to provide mindfulness education to this population. I believe the pairing of mindfulness and self-care in an experiential introductory course is a step in the right direction. Jon Kabat-Zinn (2016) believes every person is born with the capability of awareness but must be intentional about cultivating it. It is my hope that we continue to discover ways to bring this ancient practice to caregivers, that their health, well-being, and quality of life, and that of their patients, may be enhanced through participation.

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**APPENDICES**

Appendix A

CCHS Faculty Syllabus Appendix

**Cabarrus College of Health Sciences  
Concord, North Carolina**

**Faculty Syllabus Appendix**

**IHS 350  
Mindfulness for Self-Care**

**Spring 2018**

**Instructor of Record**

**Katrina Larrison, OTR/L, RYT-200**

**Teaching Philosophy:**

**Katrina Larrison:** I believe our best learning occurs when we are able to make meaning of our experiences. Finding creative ways to activate a student's prior knowledge toward making a meaningful connection with new concepts, is a process I thoroughly enjoy.

Guiding them to build upon that connection to integrate past and present in a way that changes the quality of their thinking, reflects my nurturing and developmental approach to teaching. I place emphasis on strengthening every student's self-concept through knowing; as I believe it fosters self-directed learning and enhances their ability to balance autonomy with collaborative teamwork, in their future roles as clinicians.

I believe in educating students to be educators and strive to create an inclusive environment: where every student feels valued and can celebrate the growth in others; where every student feels safe to express their thoughts and questions; and where every student is encouraged to develop their own therapeutic style. Utilizing lecture, group discussion, role play, self-reflection, visualization, and movement arts; I seek to provide learning opportunities that tap into the mind, body, and spirit.

**Faculty Contact Information:**

Lead Instructor: Katrina Larrison, OTR/L, RYT-200

Office: Adjunct Office

Office Hours: Please schedule an appointment

Phone: 704-242-2195

Email: [katrina.larrison@cabarruscollege.edu](mailto:katrina.larrison@cabarruscollege.edu)

Program Director: Nancy Green MHA, OTR/L, RYT-200

Office #: 327

Office Hours: Tuesday, Wednesday, and Thursday 11:00 – 3:00 p.m.

Phone #: Work – 704-403-3599 or Cell Phone 980-616-4562

Email: [nancy.green@cabarruscollege.edu](mailto:nancy.green@cabarruscollege.edu)

**Technical Support:** Support for the Canvas Learning Management System is provided 24/7/365 by calling the Canvas Support Hotline at 866-862-3131. When logged into Canvas, support is also available via live chat, by clicking on the “Help” menu located in the top right-hand corner. Contact support if you need help using the system or if any technical issues arise.

**Required Textbooks**

Kabat-Zinn, J. (2013). *Full catastrophe living: Using the wisdom of your body and mind to face stress, pain, and illness* (2<sup>nd</sup> ed.). New York, NY: Bantam Books Trade Paperback. (available through most booksellers)

Kabat-Zinn, J. (2016). *Mindfulness for beginners: Reclaiming the present moment – and your life*. Boulder, CO: Sounds True, Inc. ISBN: 978-1-62203-667-7 (I have 7 new copies of this book that I purchased in bulk. Each includes a mediation CD. Cost is \$8.00 per book or you can purchase through a retailer)

### Additional Required Articles

The following independent book chapters and scholarly articles are required reading. They can be accessed through the online medical library, or will be made available on Canvas, within the “fair use” guidelines.

- Adler, R. B., Rosenfeld, L. B., & Proctor, R. F. (n.d.) Chapter outline. In *Interplay: The process of interpersonal communication* (12<sup>th</sup> ed.) (chapter 7). Retrieved from: <http://global.oup.com/us/companion.websites/9780199827428/student/chapt7/outline/>
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- Sharma, D. (2016). An introduction to clinical mindfulness. *Day Surgery Australia, 15* (2), 3-7.
- Smallwood, J., Mrazek, M. D., & Schooler, J. W. (2011). Medicine for the wandering mind: Mind wandering in medical practice. *Medical Education, 45*(11), 1072-1080. doi:10.1111/j.1365-2923.2011.04074.x
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### Other Required Materials

- Yoga Mat (make sure it is 5-6mm or ¼” thick)
- 2 Tennis balls or 2 Lacrosse balls
- Device for playing audio meditations (phone, mp3, computer, or cd player)

### Optional Materials:

- 2 Yoga blocks

### Student Learning Outcomes with Evidence of Student Learning:

Student Learning Outcome	Evidence of Student Learning
1. Recognize the value of self-care for wellness and prevention of burnout in healthcare professionals.	Classroom participation and discussion Formal and Informal practice logs Quizzes
2. Utilize the practice of mindfulness toward assessing and improving personal self-care habits.	Self-Care Assessments Journaling Midterm Reflections Final Reflection Paper
3. Apply the precepts and attitudes of mindfulness to everyday life.	Five Facet Mindfulness Questionnaire Classroom participation and discussion Formal and Informal practice logs

	Midterm Reflections Final Reflection Paper
4. Discover the positive relationship between systematic and routine mindfulness practice and self-regulation.	Formal and Informal practice logs Journaling Quizzes Reading to Practice Application
5. Examine the synergetic relationship between mindfulness and self-compassion, and their functions in reducing suffering.	Self-Care Assessments Classroom participation and discussion Formal and Informal practice Journaling Quizzes
6. Employ embodied learning strategies toward increasing awareness, knowing, and overall well-being.	Five Facet Mindfulness Questionnaire Classroom participation and discussion Reading to Practice Application Midterm Reflections Final Reflection Paper
7. Relate research from other fields of study toward an ever-expanding understanding of mindfulness.	Classroom participation and discussion Quizzes Reading to Practice Application Midterm Reflections Final Reflection Paper

### Teaching Strategies:

- Completion of Five Facet Mindfulness Questionnaires to measure trait mindfulness
- Completion of personal self-care assessments to explore current habits of self-care and identify areas for desired change
- Thematic lesson plans that include textbook readings, lecture, poetry and short stories, class discussion, small group interaction, multi-modal application activities, and guided meditations
- Exposure to scholarly work in other fields (psychology, education, medicine, nursing, and allied health) that draw from and contribute to the study of mindfulness
- Required daily formal and informal meditation practice outside of class to encourage embodied learning and the establishment of a life-long mediation practice
- Content private journal assignments to encourage reflection and self-exploration toward achieving self-care goals
- Graded homework assignments that are highly experiential and reflective to promote self-exploration, learning, and personal change
- Group process through closed educational group to provide a supportive and interactive learning environment
- Class participation to identify personal modification needs with instructor, develop confidence toward self-guided meditation, and promote integration of mindfulness concepts

- In class practice of a variety of mindfulness meditations, including yoga, stretching, body scan, breathing, sitting, walking, and lying down meditations to encourage the use of the body as a tool and site of learning
- Timed, open book quizzes to encourage responsible completion of assigned readings, expand understanding of concepts covered in lecture, and promote integration of concepts into experiential and reflective assignments
- Reflective midterm and final papers to recognize application to daily life and changes in self-care and mindfulness practice over the length of the course.
- Participation in a 3-hour silent retreat to: expand capacity for meditation, observe growth, and recognize the value of personal periodic breaks from technology and role related stimuli

### Assessment Methods:

• Daily Practice Log	15%
• Journals	10%
• Reading Quizzes	20%
• Assignments	15%
• Midterm Essays	15%
• Final Reflection Paper	<u>25%</u>
	100%

### General Information:

**Class Attendance/Participation:** Students are required to be present, on-time and prepared for all classes. This includes being dressed appropriately for meditation and gentle exercise, and having yoga mat and any supportive materials they prefer for the meditation exercises.

### Attendance Requirements:

To prepare students for their future role as a professional in the workplace, there are certain actions which students must demonstrate in class.

- Students are expected to attend all required class related experiences, and show evidence of preparation for the learning activity.
- Students are expected to be on time or they are considered late and may be denied entrance to the classroom.
- Extensive absences will result in failure to meet course objectives; therefore, absences should occur only in situations of personal illness, immediate family illness, or death.
- Attendance will be assessed as part of the Class Participation and Professional Behaviors. However, if a student is absent from more than three classes/lectures or laboratory sessions, there will be a drop in one letter grade for the course.
- In the event of an illness or other emergency, the student must notify the instructor at least one hour in advance of class via voicemail or email, and include their name, date, and reason for absence. A physician's note may be required.

- Students are responsible for the material covered in class and following the department policies for making up work or tests. Failure to adhere to this policy will result in a test or assignment grade of zero.
- Five points will be deducted for each day projects or assignments are overdue.

The Class Participation and Professional Behaviors grade will be based on the following expectations:

**Attendance** - Present for class lectures

**Timeliness** - Arrive before the start of class.

**Participation** - Take part in classroom discussions, meditations, and activities. Ask appropriate questions.

**Attentive** - Actively listen and attend to faculty and classmates during class.

**Student ID Badge**- Wear student ID badge per Cabarrus College protocol.

**Phone Use /Electronic Devices**- Phones and electronic devices may only be used during class in the “airplane” mode.

**Attire** – Dress appropriately for class and clinical experiences according to the Cabarrus College guidelines.

**Self-Assessments:** Students will complete the Five Facet Mindfulness Questionnaire and the Self-Care Assessment at both the beginning and end of the course to assist with goal setting and to identify changes experienced over the course.

**Weekly Practice Log:** Because the practice of mindfulness begins with systematic and consistent practice, students are required to carry out five formal and 2-3 informal practices per week as outlined in the syllabus. Each formal practice is 10-15 minutes in length. Students will need daily access to a device for playing digital and/or cd formatted audio recordings (phone, mp3 player, cd player, computer, etc.). Students are required to attest to their weekly practice with their signature, and hand in the practice log at the beginning of the next class. Ten points will be deducted for each missed formal, informal, and observation requirement.

**Reading Quizzes:** Students are required to complete 6 online quizzes as outlined in the syllabus. The quizzes are specifically designed to reinforce concepts introduced in class and assigned readings, assist with integration and application of these concepts, and foster familiarity with additional novel concepts. Each open book quiz consists of 35 questions, which must be completed in 45 minutes. Two attempts are allowed with the average score of the two standing as the grade for that quiz.

**Journal Activities:** Students are required to complete 10 prompted journals as outlined in the syllabus. The journals are to be handwritten on college ruled notebook paper, and presented for completion check at the beginning of the next class. Because the purpose of these journals is to promote deep exploration and honest reflection, they will not be read for content; and APA guidelines are not required. Students are encouraged to draw from their journaling experiences to contribute to group discussions and to complete the midterm and final reflection papers. To receive completion credit, each journal should be .5 to 1 page in length, single spaced, and handwritten.

**Experiential Assignments:** Students are required to complete seven assignments as outlined in the syllabus. Their purpose is to link the classroom and readings to experience. They are to be written in APA format and submitted online by 11:59 on the day before the next class.

**3-Hour Silent Retreat:** This retreat is intended to expand the students' capacity for meditation, provide them the opportunity to observe growth, and expose them to the benefits of periodic breaks from technology and role related stimuli. They are required to attend the entire time and submit a reflective writing of their experience.

**Midterm Reflections:** This is an opportunity for students to synthesize, very simply, everything they have learned thus far about mindfulness; and reflect on any influence it may be having on their lives. Students are encouraged to draw from all readings, journals, assignments, discussions, and daily practice, to write two separate narrative reflections that respond to two questions. These papers are due by 11:59 pm on the day before the week 10 class meeting.

**Final Assessment:** This is an opportunity for students to recognize growth in trait mindfulness and self-care, and reflect on their overall experience in the course. Students will complete a 2nd Five Facet Mindfulness Questionnaire, a 2<sup>nd</sup> Self-Care Assessment, and a reflective paper for the final assessment. The paper is to be written in APA format and submitted online by 11:59 pm on the assigned exam day. Using the provided rubric as a guide, students are encouraged to draw from all readings, journals, assignments, discussions, daily practice, and self-assessments to write a well-organized and integrated reflective paper that responds to four questions.

<b>Course Content / Calendar: Week &amp; Date</b>	<b>Topics or Activities</b>	<b>Assignments Due</b>
Week 1 Jan. 10-16	<ul style="list-style-type: none"> <li>• Introduction and overview of syllabus</li> <li>• Assessment of trait mindfulness</li> <li>• Assessment of self-care habits</li> <li>• Importance of self-care for healthcare professionals</li> <li>• Foundation and attitudes of mindfulness</li> <li>• Morning stretch</li> </ul>	<ul style="list-style-type: none"> <li>• <i>What is Mindfulness</i> – full article</li> <li>• <i>Mindfulness and Self-care for the Clinician</i> – full article</li> <li>• <i>Full Catastrophe Living</i> – pp. 1-18, 19-38</li> <li>• <i>Mindfulness for Beginners</i> – pp. 1-5</li> <li>• <b>Practice log</b></li> <li>• <b>Quiz</b></li> <li>• <b>Journal</b></li> </ul>
Week 2 Jan. 17-23	<ul style="list-style-type: none"> <li>• Role of the breath in mindfulness</li> <li>• Mindfulness as a practice and a state</li> <li>• Applying the seven attitudes of mindfulness</li> <li>• Mindful breathing</li> <li>• Mindful observation</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Full Catastrophe Living</i> – pp. 39-53, 54-74</li> <li>• <i>Mindfulness for Beginners</i> – pp.7-18</li> <li>• <b>Practice log</b></li> <li>• <b>Reading to Practice Application</b></li> </ul>
Week 3 Jan. 24-30	<ul style="list-style-type: none"> <li>• Role of attention in mindfulness</li> <li>• Influence of mindfulness on attention regulation</li> <li>• Freedom to “think outside of the box”</li> <li>• 5 senses walking meditation</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Full Catastrophe Living</i> – pp. 175-192</li> <li>• <i>Mindfulness for Beginners</i> – pp. 19-33</li> <li>• <i>How Does Mindfulness Meditation Work?</i> – pp. 537-541</li> <li>• <i>Medicine for the Wandering Mind</i> – full article</li> <li>• <b>Practice log</b></li> <li>• <b>Quiz</b></li> <li>• <b>Journal</b></li> </ul>

<p>Week 4 Jan. 31-Feb. 6</p>	<ul style="list-style-type: none"> <li>• Role of thought in mindfulness</li> <li>• Destructive mind states</li> <li>• Human tendencies toward “selfing”</li> <li>• Influence of mindfulness on reaction to thoughts</li> <li>• Sounds, thoughts, and emotions meditation</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Full Catastrophe Living</i> – pp. 123-131, re-read 189-192</li> <li>• <i>Mindfulness for Beginners</i> – pp. 34-46, 106-117</li> <li>• <i>Selfing</i> – full chapter</li> <li>• <b>Practice log</b></li> <li>• <b>Journal</b></li> </ul>
<p>Week 5 Feb. 7-13</p>	<ul style="list-style-type: none"> <li>• Role of body awareness in mindfulness</li> <li>• Influence of mindfulness on body awareness</li> <li>• Embodied learning and knowing</li> <li>• Body Scan</li> <li>• Perception and attitudes toward body</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Full Catastrophe Living</i> – pp. 75-88 (88-97 optional)</li> <li>• <i>How Does Mindfulness Meditation Work?</i> – pp. 541-543</li> <li>• <i>Off the Beaten Path</i> – full article</li> <li>• <i>Mindfulness for Beginners</i> – pp. 54-61</li> <li>• <b>Practice log</b></li> <li>• <b>Quiz</b></li> <li>• <b>Journal</b></li> </ul>
<p>Week 6 Feb. 14-20</p>	<ul style="list-style-type: none"> <li>• Concept of flow</li> <li>• Relationship between mindfulness and flow</li> <li>• How flow impacts learning</li> <li>• Yoga meditation</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Enjoyment and the Quality of Life</i> – full chapter</li> <li>• <i>Mindfulness for Beginners</i> – pp. 79-89</li> <li>• <i>I Know Right Down to My Ribs</i> – full article</li> <li>• <b>Practice log</b></li> <li>• <b>Viewing Reflection</b></li> <li>• <b>Journal</b></li> </ul>
<p>Week 7 Feb. 21-27</p>	<ul style="list-style-type: none"> <li>• Body’s physiological and psychological response to stress</li> <li>• Role of brain structures in managing stress</li> <li>• Role of mindfulness in emotion regulation</li> <li>• Exploring personal stressors and coping</li> <li>• Mountain meditation</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Full Catastrophe Living</i> – pp. 287-334</li> <li>• <i>Anatomy of an Emotional Hijacking</i> – full article</li> <li>• <i>How Does Mindfulness Meditation Work?</i> – pp. 543-547</li> <li>• <b>Practice log</b></li> <li>• <b>Quiz</b></li> <li>• <b>Journal</b></li> </ul>

<p>Week 8 Feb. 28- March 13</p>	<ul style="list-style-type: none"> <li>• Acknowledging stress toward managing it</li> <li>• Role of mindfulness in adaptive coping</li> <li>• Role of mindfulness in emotion regulation</li> <li>• Mini mindfulness meditations</li> <li>• Exploring potential for change in stress management</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Full Catastrophe Living</i> – pp. 335-349</li> <li>• <i>Mindfulness Training Improves Problem-Focused Coping</i> – full article</li> <li>• <b>Practice log</b></li> <li>• <b>Reading to Practice Application</b></li> <li>• <b>Journal</b></li> </ul>
<p>Week 9 March 14-20</p>	<ul style="list-style-type: none"> <li>• Role of mindfulness in reducing suffering</li> <li>• Choosing to reduce adventitious suffering</li> <li>• Individual capacity to change and direct life</li> <li>• Lake meditation</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Full Catastrophe Living</i> – pp. 269-284, 411-429 (430-451 op)</li> <li>• <i>Mindfulness for Beginners</i> – pp. 91-105</li> <li>• <b>Practice log</b></li> <li>• <b>Midterm Reflections</b></li> </ul>
<p>Week 10 March 21-27</p>	<ul style="list-style-type: none"> <li>• Influence of mindfulness on self-concept</li> <li>• Mechanisms of mindfulness are interrelated</li> <li>• Elements of self-compassion</li> <li>• Exploring current practice of self-compassion</li> <li>• Loving kindness meditation</li> <li>• Self-compassion break</li> </ul>	<ul style="list-style-type: none"> <li>• <i>How Does Mindfulness Meditation Work?</i> – pp. 547-559</li> <li>• <i>Self-Compassion: What it is, What it Does, and How it Relates to Mindfulness</i> – full article</li> <li>• <i>Loving Kindness Meditation</i> – full chapter</li> <li>• <b>Practice log</b></li> <li>• <b>Quiz</b></li> <li>• <b>Journal</b></li> </ul>
<p>Week 11 March 28- April 3</p>	<ul style="list-style-type: none"> <li>• How beliefs, attitudes, thoughts, and emotions effect well being</li> <li>• Thought patterns that contribute to health</li> <li>• How stress response influences health outcomes</li> <li>• How to translate knowledge to daily practice</li> <li>• Gratitude meditation</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Full Catastrophe Living</i> – pp. 242-268</li> <li>• <b>Practice log</b></li> <li>• <b>Reading to Practice Application</b></li> <li>• <b>Journal</b></li> </ul>

Week 12 April 4-10	<ul style="list-style-type: none"> <li>• Influence of mindfulness on communication</li> <li>• Exploring the complex act of listening</li> <li>• Mindful speaking and listening strategies</li> <li>• 4 key practices in mindful communication</li> <li>• Listening meditation</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Communication that Heals</i> – full article</li> <li>• <i>Mechanisms of Mindfulness in Communication Training</i> – pp. 406, 415-417</li> <li>• <i>Interplay Chapter Outline</i> – full outline</li> <li>• <b>Practice log</b></li> <li>• <b>Quiz</b></li> </ul>
Week 13 April 11-17	<ul style="list-style-type: none"> <li>• Stress of eating and sleeping</li> <li>• Impact food choices have on health</li> <li>• Exploring current eating and sleeping habits</li> <li>• Role of mindfulness in eating and sleeping</li> <li>• Applying mindful eating strategies</li> <li>• Meditation for sleep</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Full Catastrophe Living</i> – pp. 470-477, 516-537</li> <li>• <b>Practice log</b></li> <li>• <b>Reading to Practice Application</b></li> <li>• <b>Journal</b></li> </ul>
Week 14 April 18-24	<ul style="list-style-type: none"> <li>• three-hour silent retreat</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Full Catastrophe Living</i> – pp. 132-146</li> <li>• <b>Practice log</b></li> <li>• <b>Retreat attendance</b></li> </ul>
Week 15 April 25-May 1	<ul style="list-style-type: none"> <li>• Reinforcement of mindfulness precepts</li> <li>• Reinforcement of seven attitudes</li> <li>• Group debriefing</li> <li>• Final exam requirements</li> <li>• Reassessment of trait mindfulness</li> </ul>	<ul style="list-style-type: none"> <li>• <i>An Introduction to Clinical Mindfulness</i> – full article (optional)</li> </ul>
Week 16 May 2	<ul style="list-style-type: none"> <li>• Reassessment of self-care habits</li> <li>• Final Reflection Paper due</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Final Paper</b></li> </ul>

**\*Please note that the schedule is tentative and may be modified by the faculty. Content and sequencing may change at the sole discretion of the instructor.**

## Appendix B

## Weekly Lesson Plans

**Week 1****Student Instructional Objectives**

- 1) Understand procedure and expectations of course
- 2) Assess current trait mindfulness
- 3) Assess current self-care habits
- 4) Identify personal goals for self-care practice
- 5) Discuss the importance of self-care for healthcare professionals
- 6) Apply the definition, foundation, and attitudes of mindfulness
- 7) Practice the morning stretch

**Required materials**

- 1) Yoga mat
- 2) 2 Tennis or lacrosse balls

**Content**

Introduction – name and motivation for enrolling in course; nature of closed, educational group; confidentiality of group members

Participation in Research – describe project; obtain signed consent/release form for each student

Exploration – complete Five Facet Mindfulness Questionnaire (teacher collects, scores, keeps), define self-care, discuss Self-Care Inventory

Mindfulness Activity – guided participation in morning stretch

Lecture/Discussion – go over syllabus; review formats for assignments; reinforce required outside practice as part of class time; define mindfulness; describe seven attitudes of mindfulness

**Assignments to complete this week**

Materials: bring yoga mat to next class

Daily Practice Log: (hand in at beginning of next class)

Formal practice (5 days required)

1. Morning stretch
2. Morning stretch
3. Morning stretch
4. Morning stretch
5. Morning stretch

Informal practice (2 required)

Required observations/comments:

1. Thoughts and feelings associated with designating a time each day for self-care.
2. Notice how your attention comes and goes in informal practice (washing dishes, etc.)

Readings:

1. Shapiro, S. L., & Carlson, L. E. (2017). What is mindfulness? In *The art and science of mindfulness: Integrating mindfulness into psychology and the helping professions* (pp. 9-20). Washington, DC: American Psychological Association.
2. Shapiro, S. L., & Carlson, L. E. (2017). Mindfulness and self-care for the clinician. In *The art and science of mindfulness: Integrating mindfulness into psychology and the helping professions* (115-126). Washington, DC: American Psychological Association.
3. Full Catastrophe Living, pp. 1-18 (You only have moments to live)
4. Full Catastrophe Living, pp. 19-38 (Foundations and attitudes of mindfulness)
5. Mindfulness for Beginners, pp. 1-5 (Introduction)

Readings Quiz: Complete quiz online by 11:59 pm on day before next class)

Journal Assignment: (bring to next class for completion check)

“Goals for Self-care Collage”

Complete the Self-Care Inventory. Using it as a starting point, create a collage on 11x14 paper, depicting any self-care changes or goals you would like to realize over the next 16 weeks. As a handwritten journal entry, list your goals and discuss how the foundations and attitudes of mindfulness may support you toward making these changes.

## Week 2

### **Student Instructional Objectives**

- 1) Discuss the role of the breath in mindfulness
- 2) Differentiate between mindfulness as a practice and a state in daily life
- 3) Apply the seven attitudes of mindfulness to formal and informal practice
- 4) Practice mindful breathing
- 5) Practice mindful observation

### **Required materials**

- 1) Yoga mat

### **Content**

Assignment completion check – practice log and self-care goal collage and journal

Introduction – take a breath, say your name and one bodily sensation you noticed upon inhale

Group process – share response, concerns, and insights realized in last week’s formal and informal practice and readings. Share thoughts and/or insights discovered in making self-care goal collage.

Mindfulness activity – guided participation in mindful breathing

Lecture/Discussion – Big M and little m; intention, attention, and attitude; formal and informal practice; seven attitudes in daily life; the breath

Mindfulness activity – guided participation in mindful observation

### **Assignments to complete this week**

Materials: bring yoga mat to next class

Daily Practice Log: (hand in at beginning of next class)

Formal practice (5 days required)

1. Mindful breathing
2. Morning stretch
3. Mindful observation
4. Morning stretch
5. Mindful breathing

Informal practice (2 required)

Required observations/comments:

1. Recognize opportunities to incorporate the seven attitudes of mindfulness
2. Compare/contrast formal and informal practices

Readings:

1. Full Catastrophe Living, pp. 39-53 (The Power of Breathing)
2. Full Catastrophe Living, pp. 54-74 (Sitting Meditation)
3. Mindfulness for Beginners, pp. 7-18 (awareness, breath, being mode)

Assignment: (APA, submit online by 11:59 pm on day before next class)

You have learned that mindfulness is both a practice (m) and a state of being (M). In 350-500 words, discuss how that dual role is expressed in your formal and informal practice. How do you see the potential for a similar duality in your self-care? Consider the following conceptualizations of mindfulness to get you started.

Mindfulness is...

- 1) the hardest work in the world
- 2) taking care of the moment
- 3) awareness
- 4) the difference between doing mode and being mode

### Mindful Breathing

This exercise can be done standing up or sitting down, and pretty much anywhere at any time. If you can sit down in the meditation (lotus) position, that's great, if not, no worries. Either way, all you have to do is be still and focus on your breath for just one minute.

1. Start by breathing in and out slowly. One breath cycle should last for approximately 6 seconds.

2. Breathe in through your nose and out through nose or mouth, letting your breath flow effortlessly in and out of your body.
3. Let go of your thoughts. Let go of things you have to do later today or pending projects that need your attention. Simply let thoughts rise and fall of their own accord and be at one with your breath.
4. Purposefully watch your breath, focusing your sense of awareness on its pathway as it enters your body and fills you with life.
5. Then watch with your awareness as it works work its way up and out of your mouth and its energy dissipates into the world.

If you are someone who thought they'd never be able to meditate, guess what? You are half way there already!

If you enjoyed one minute of this mind-calming exercise, why not try two or three?

James, A. (2017). Six mindfulness exercises you can try today. In *Pocket mindfulness*. Retrieved from <https://www.pocketmindfulness.com/6-mindfulness-exercises-you-can-try-today/>

### Mindful Observation

This exercise is simple but incredibly powerful because it helps you notice and appreciate seemingly simple elements of your environment in a more profound way. The exercise is designed to connect us with the beauty of the natural environment, something that is easily missed when we are rushing around in the car or hopping on and off trains on the way to work.

1. Choose a natural object from within your immediate environment and focus on watching it for a minute or two. This could be a flower or an insect, or even the clouds or the moon.
2. Don't do anything except notice the thing you are looking at. Simply relax into watching for as long as your concentration allows.
3. Look at this object as if you are seeing it for the first time.
4. Visually explore every aspect of its formation and allow yourself to be consumed by its presence.
5. Allow yourself to connect with its energy and its purpose within the natural world.

James, A. (2017). Six mindfulness exercises you can try today. In *Pocket mindfulness*. Retrieved from <https://www.pocketmindfulness.com/6-mindfulness-exercises-you-can-try-today/>

## Week 3

### **Student Instructional Objectives**

- 1) Discuss the role of attention in mindfulness
- 2) Discover the positive influence mindfulness has on attention regulation
- 3) Relate mindfulness and the freedom to “think outside of the box”
- 4) Practice five senses walking meditation

**Required materials**

- 1) Yoga mat

**Content**

Assignment completion check – practice log

Introduction – take a breath, say name and one adjective you believe describes you

Group process – share response, concerns, and insights realized in last week’s formal and informal practice; share thoughts and/or insights discovered through the reading to practice application.

Mindfulness activity – guided participation in five senses walking meditation

Application Activity (thinking outside of box) – ping pong ball in bottle, paper airplane challenge, or nine dots puzzle, depending on member familiarity

Lecture/Discussion - wandering mind; framing incoming information; decoupling perceptions; regulating attention while expanding attentiveness

**Assignments to complete this week**

Materials: bring yoga mat to next class

Daily Practice Log: (hand in at beginning of next class)

Formal practice (5 days required)

1. Five senses walking meditation
2. Morning stretch
3. Mindful breathing
4. Morning stretch
5. Mindful observation

Informal practice (2 required)

Required observations/comments:

1. Recognize mind wandering and gently bring your mind back to the task at hand.
2. Recognize opportunities to “think outside the box” this week.

Readings:

1. Full Catastrophe Living, pp. 175-192 (Wholeness and Separateness)
2. Mindfulness for Beginners, pp. 19-33 (Science, Wakefulness, Default setting, Attention/Awareness/Thought)
3. Hölzel, B. K., Lazar, S. W., Gard, T., Schuman-Olivier, Z., Vago, D. R., & Ott, U. (2011). How does mindfulness meditation work? Proposing mechanisms of action from a conceptual and neural perspective. *Perspectives On Psychological Science*, 6(6), 537-559. doi:10.1177/1745691611419671

**Read pages 537-541 only, stop at body awareness**

4. Smallwood, J., Mrazek, M. D., & Schooler, J. W. (2011). Medicine for the wandering mind: Mind wandering in medical practice. *Medical Education*, 45(11), 1072-1080. doi:10.1111/j.1365-2923.2011.04074.x

Readings Quiz: (complete online by 11:59 pm on day before next class)

Journal Assignment: (bring to next class for completion check)

Read the fable, “Upstream Downstream”. As a handwritten journal entry, discuss what you interpret as the central message of the story, and how it relates to your approach to life (work, school, relationships, self-care, etc.).

### **A CONTEMPORARY FABLE UPSTREAM/DOWNSTREAM**

It was many years ago that the villagers of Downstream recall spotting the first body in the river. Some old timers remember how Spartan were the facilities and procedures for managing that sort of thing. Sometimes, they say, it would take hours to pull 10 people from the river, and even then only a few would survive.

Though the number of victims in the river has increased greatly in recent years, the good folks of Downstream have responded admirably to the challenge. Their rescue system is clearly second to none: most people discovered in the swirling waters are reached within 20 minutes – many less than 10. Only a small number drown each day before help arrives – a big improvement from the way it used to be.

Talk to the people of Downstream and they’ll speak with pride about the new hospital by the edge of the waters, the flotilla of rescue boats ready for service at a moment’s notice, the comprehensive health plans for coordinating all the manpower involved, and the large numbers of highly trained and dedicated swimmers always ready to risk their lives to save victims from the raging currents. Sure it costs a lot but, say the Downstreamers, what else can decent people do except to provide whatever is necessary when human lives are at stake.

Oh, a few people in Downstream have raised the question now and again, but most folks show little interest in what’s happening Upstream. It seems there’s so much to do to help those in the river that nobody’s got time to check how all those bodies are getting there in the first place. That’s the way things are, sometimes.

Donald Ardell: High Level Wellness: An Alternative to Doctors, Drugs and Disease

#### Five Senses Walking Meditation

Focus on the act and sensation of walking up and back a predetermined and limited lane, approximately 15-20 feet long. At the end of each lap, stop, ground yourself in standing, align spine and body parts, and engage in one of the five senses observations. Repeat until all five have been addressed.

Use this exercise to quickly ground yourself in the present when you only have a moment.

The

goal is to notice something that you are currently experiencing through each of your senses.

**What are five things you can see?** Look around you and notice five things you hadn't noticed before. Maybe a pattern on a wall, light reflecting from a surface, or a knick-knack in the corner of a room.

**What are four things you can feel?** Maybe you can feel the pressure of your feet on the floor, your shirt resting on your shoulders, or the temperature on your skin. Pick up an object and notice its texture.

**What are three things you can hear?** Notice all the background sounds you had been filtering out, such as an air-conditioning, birds chirping, or cars on a distant street.

**What are two things you can smell?** Maybe you can smell flowers, coffee, or freshly cut grass. It doesn't have to be a nice smell either: maybe there's an overflowing trash can or sewer.

**What is one thing you can taste?** Pop a piece of gum in your mouth, sip a drink, eat a snack if you have one, or simply notice how your mouth tastes. "Taste" the air to see how it feels on your tongue.

The numbers for each sense are only a guideline. Feel free to do more or less of each. Also, try this exercise while doing an activity like washing dishes, listening to music, or going for a walk.

## Week 4

### Student Instructional Objectives

- 1) Discuss the role of thought in mindfulness
- 2) Compare and contrast destructive mind states (greed, aversion, delusion)
- 3) Interpret human tendencies toward "selfing" (I, me, and mine)
- 4) Discover the role mindfulness plays in managing reaction to thoughts
- 5) Practice the sounds, thoughts, and emotions meditation

### Required materials

- 1) Yoga mat

### Content

Assignment completion check – practice log and "Upstream Downstream" journal entry

Introduction – take a breath, say name and one thought currently in your head

Group process – share response, concerns, and insights realized in last week's formal and informal practice; share thoughts and/or insights discovered through "Upstream Downstream" journal assignment.

Lecture/Discussion – nothing wrong with thinking; thoughts outside of awareness can run amuck; destructive mind states (greed, aversion, and delusion); ahimsa (non-harming)

Mindfulness activity – guided participation in sounds, thoughts, and emotions meditation

### Assignments to complete this week

Materials: bring yoga mat to next class

Daily Practice Log: (hand in at beginning of next class)

Formal practice (5 days required)

1. Sounds, thoughts, and emotions meditation
2. Morning stretch
3. Mindful breathing
4. Five senses walking meditation
5. Mindful observation

Informal practice (2 required)

Required observations/comments:

1. Recognize instances of “selfing”.
2. Recognize destructive mind states as they arise (greed, aversion, delusion).

Readings:

1. Full Catastrophe Living, pp. 123-131 (Walking meditation)
2. Full Catastrophe Living, pp. re-read 189-192 (preoccupation with self)
3. Mindfulness for Beginners, pp. 34-46 (thinking, thoughts, and selfing)
4. Kabat-Zinn, J. (2005). Selfing. In *Wherever you go, there you are: Mindfulness meditation in everyday life* (pp.236-240). New York, NY: Hatchett Books.
5. Mindfulness for Beginners, pp. 106-117 (ahimsa, greed, aversion, delusion)

Journal Assignment: (bring to next class for completion check)

“Keeping Track of My Thoughts”

Be intentionally aware of your thoughts this week in your everyday life. In a handwritten journal entry, discuss how often those thoughts are based in greed, aversion, delusion, or selfing; and what effect those destructive mind states have on your next thought, feeling, decision, or action.

## Week 5

### **Student Instructional Objectives**

- 1) Discuss the role of body awareness in mindfulness
- 2) Discover the role mindfulness plays in increasing body awareness
- 3) Utilize embodied learning strategies toward expanded knowing
- 4) Practice the body scan
- 5) Evaluate perception, attitudes, and relationship with own body

### **Required materials**

- 1) Yoga mat

### **Content**

Assignment completion check – practice log and “Keeping Track of My Thoughts” journal entry

Introduction – take a breath, say name and one bodily sensation being immediately felt

Group process – share response, concerns, and insights realized in last week’s formal and informal practice; share thoughts and/or insights discovered through “Keeping Track of My Thoughts” journal assignment.

Mindfulness activity – guided participation in a body scan

Lecture/Discussion – define somatic and embodied learning; impact of embodiment on learning; how body awareness influences choices and decisions; body/mind feedback; how body awareness influences emotion regulation; knowing; proprioception and interoception

### **Assignments to complete this week**

Materials: bring yoga mat to next class

Daily Practice Log: (hand in at beginning of next class)

Formal practice (5 days required)

1. Body scan
2. Mindful breathing
3. Sounds, thoughts, and emotions meditation
4. Morning stretch
5. Body scan

Informal practice (2 required)

Required observations/comments:

1. Recognize your body’s knowledge.
2. How does your body’s knowledge impact your overall knowing?

Readings:

1. Full Catastrophe Living, pp. 75-88 (Body Scan)
2. Hölzel, B. K., Lazar, S. W., Gard, T., Schuman-Olivier, Z., Vago, D. R., & Ott, U. (2011). How does mindfulness meditation work? Proposing mechanisms of action from a conceptual and neural perspective. *Perspectives On Psychological Science*, 6(6), 537-559. doi:10.1177/1745691611419671  
**Read only pages 541-543, start at 2. Body Awareness, stop at Emotion Regulation**
3. Clark, M.C. (2001). Off the beaten path: Some creative approaches to adult learning. *New Directions for Adult and Continuing Education*, 2001 (89), 83-91. Retrieved from: proxying.lib.ncsu.edu
4. Mindfulness for Beginners, pp. 54-61 (proprioception, interoception, knowing)

Optional Reading:

Full Catastrophe Living, pp. 88-97 (more detail on body scan)

Readings Quiz: (complete online by 11:59 pm on day before next class)

Journal Assignment: (bring map and journal to next class for completion check)  
“Body Map and Attitude Reflection”

Using any paper size 11x14 or larger, draw a map of your body. Use size/scale variation, color, texture, etc. to illustrate how you perceive it and/or how you believe others perceive it. As a handwritten journal entry, discuss your attitude, thoughts, and feelings toward your body; struggles, how you treat it, how it serves you, etc. Begin to explore the origin of these attitudes, feelings, and thoughts. How does your relationship with your body influence your self-care? How does your knowledge of your body impact your overall knowing?

## Week 6

### Student Instructional Objectives

- 1) Discuss the concept of flow
- 2) Relate mindfulness to flow
- 3) Discover how flow impacts learning
- 4) Practice the yoga meditation

### Required materials

- 1) Yoga mat

### Content

Assignment completion check – practice log and “Body Map and Attitude Reflection” journal entry

Introduction – take a breath, say name and one feeling immediately being experienced

Group process – share response, concerns, and insights realized in last week’s formal and informal practice; share thoughts and/or insights discovered through “Body Map and Attitude Reflection” journal assignment.

Application activity – The perfect square game (getting in the flow)

Lecture/Discussion – what is flow; how to cultivate flow; sweet spot of flow; member sharing of when they have experienced flow in their lives; relationship between mindfulness and flow; flow and learning

Mindfulness activity – guided participation in yoga meditation

### Assignments to complete this week

Materials: bring yoga mat to next class

Daily Practice Log: (hand in at beginning of next class)

Formal practice (5 days required)

1. Yoga meditation
2. Mindful breathing
3. Sounds, thoughts, and emotions meditation
4. Morning stretch

### 5. Body scan

Informal practice (2 required)

Required observations/comments:

1. Recognize even small moments of “flow”.
2. How is “flow” different than “not flow”?

#### Readings:

1. Csikszentmihalyi, M. (1990). Enjoyment and the quality of life. In *Flow: The psychology of optimal experience* (43-70). New York, NY: Harper & Row.
2. Mindfulness for Beginners, pp. 79-89
3. Tobin, J.A., & Tisdell, E. J. (2015). “I know down to my ribs”: A narrative research study on the embodied adult learning of creative writers. *Adult Education Quarterly*, 65 (3), 215-231. doi:10.1177/0741713615574901

Assignment: (submit online by 11:59 pm on day before next class)

“Viewing Reflection”

Watch 15-20 minutes of a sporting event with the volume muted. In other words, you will not hear the accompanying whistle blows, spectator feedback, or commentary. Write a 250-word reflection on the experience, including the particular game or match you watched, a summary of what happened, any insights, feelings, or thoughts you had while watching in silence; and how the experience compares to your usual format of watching sports.

Journal Assignment: (bring to next class for completion check)

“Embodied Activities and Learning”

Choose one of your formal practice meditations this week. Coordinate its practice time so that it falls before your planned study/reading/writing time for one of your other academic courses. As a handwritten journal entry, discuss any thoughts, feelings, insights, connection, relationship you discovered through this intentional pairing. How does this compare to your usual pre-study activity?

### **Basic Yoga Series** **Katrina Larrison, RYT-200**

The goal of these basic poses is to:

- Allow you to gently explore your body’s ability to move
- Gently improve flexibility in your back and hips
- Gently improve flexibility in the backs of your legs (hamstrings and calves)
- Strengthen your abdominals and arms

Do these only within your comfort level and with your doctor’s knowledge and clearance. Pain is not ok. If anything hurts or sets off neurological symptoms such as burning, electrical pulses, numbness, or pain; do not do that motion. You can try modifying it as long as it does not produce symptoms. Do not push yourself into any pose. If your shoulders, hips, knees, or other joint, feel unstable or uncomfortable, change your alignment; or do not do that pose.

### Supplies needed:

- A yoga mat (5-6mm or ¼ inch thick). TJ Maxx has these for about \$12.00. 68” is the standard length, but they can be found in 72” for taller people.
- A pair of yoga blocks. These are available at target, Walmart, TJ Maxx. You may have something around the house that will work, such as a piece of wood or a small stool. The purpose is simply to bring the floor up closer to your hands, so you do not have to bend as far. It should be stable and solid/sturdy.

### Clothing:

- Wear comfortable clothing, loose enough to allow full motion at your joints, but tight enough to not get in the way or caught under you. Yoga pants or light knit lounge pants work well. Shorts are fine, but you may find yourself feeling stuck to the mat in sitting.
- Barefoot is best. I do not recommend wearing shoes, unless barefoot hurts, as they can get in the way of you feeling your full movement, interfere with alignment and balance, and damage your mat.

### Warm up and mat poses

#### 1) Easy Pose



1A



1B



1C



1D

1A) Sit on those two pointy bones in your bottom (Sit bones). Keep your back nice and straight, head reaching toward ceiling. Just sit and breath in through your nose, and out through your nose. It is not a nasal felt breath, but rather, felt in the back of the throat.

Try filling your lungs completely on the inhale and emptying them completely on the exhale. Feel your spine grow taller on the inhale and settle into a natural curve on the exhale.

1B) Try gently twisting to the right, looking over the right shoulder if it feels OK. Hold for a few seconds, while breathing in and out. Switch to look over the left shoulder. Don't pull yourself around with your arms, but rather, guide yourself around with your abdominal strength.

1C) Place your right hand on the floor beside you, try to lean into it, bending sideways at the left waist area. Hold for a few seconds, breathing in and out. Switch to the left side.

1D) Try folding forward gently. You can place your hands on a higher surface than the floor, such as a yoga block or a small stool. The goal of this pose is not to flex or bend the back forward. It is only to open the hips. All the forward motion comes from the hips opening. Your back should stay straight from head to tailbone, no rounding of it. When you get comfortable with this pose, try switching your leg configuration, so the one you usually put on the bottom, is on top. This will change how your hips, knees, etc. will feel. It may also indicate where tightness is on one side vs the other.

## 2) Cat/Cow Pose (3 steps)



2A) Get on your hands and knees. Use a folded blanket or foam pad under your knees if the mat is not enough padding. Make sure your hips are on top of your knees and your shoulders are directly on top of your wrists, to avoid poor alignment. Keep your back straight. This is a neutral pelvis position.

2B) Gently and slowly drop your belly down, extending your spine and head up. Breathe in on this pose.

2C) Gently and slowly, round your back up, dropping your head lightly as long as it does not cause sciatica. If it causes tingling down leg, don't drop your head, just do the back part. Breathe out on this pose.

Slowly go through 3 or 4 cycles of these 3 poses, noticing how your back feels.

## 3) Extended cat/cow pose



3A



3B

3A) Start in the neutral cat/cow position (2A). Slightly center the right knee. Bear weight through it and both hands, while extending your left leg back. If you cannot lift it to parallel to the floor, just stretch the leg back and place the toes on the floor. Try lifting it a couple of inches, then returning it back to the floor. Switch to do both legs. Don't lift the leg above parallel.

3B) Once you get comfortable with this position and can hold your leg parallel to the floor, try reaching the opposite arm out in front of you, also parallel to the floor. So, if the left leg is lifted, the right arm would be reaching forward. Come back to neutral cat/cow pose (2A).

As you get stronger, you can try bending the knee back in and extending it out with the arm out. Then you can try bringing opposite arm and knee in together, and then extending them out again. Always breathe in when you are lengthening your spine (reaching), and out when you are folding it.

#### 4) Child's pose



From neutral cat/cow (2A), gently slide your hips backward. Keep your knees apart. Let your arms rest where they are comfortable. They do not have to be all the way out front. If your head cannot touch the floor, place it on a yoga block or a small stool. The goal is to keep your back relatively straight. The more you open your hips, the more flexibility you will probably have. Hold a few seconds, breathe in and out, and then return to neutral cat/cow (2A).

### 5) Plank pose (ignore the shoes...barefoot is better unless it hurts your feet)



5A



5B

5A) From neutral cat/cow (2A), extend both feet back while lifting butt. Bear weight through the balls of your feet and your hands. Your index finger should be pointing straight ahead. If this hurts your shoulder, adjust your hand position so that it does not hurt, or do not do it. Do not let your butt and pelvis sag or stick up in the air. The goal is a straight spine from head to heel.

5B) This is a modification of plank, in the event it is easier on the shoulder. Both are great exercises for strengthening abdominals, shoulders, and chest muscles. Return to neutral cat/cow (2A).

### 6) Modified side plank pose



6A



6B

6A) From neutral cat/cow (2A), shift to the right knee, while extending the left leg back and out to the side. Open the chest and pelvis flat to side. Reach the left arm up to the ceiling. Keep your shoulder on top of your wrist, and index finger pointing forward. Try changing your head from looking down, to looking neutral, to looking toward the ceiling.

This is just a rotation of the head, not an extension of the neck. Go slow. Hold it a few seconds and breathe in and out.

6B) Try lifting the straight leg to parallel. Flex the ankle so your toes are facing like the woman in the photo. Hold it for a few seconds or 2 breath cycles. This is an outer thigh and abdominal exercise. If you see your toes turning up or down, you are cheating with other muscles. Try to keep them like the photo. Return to neutral cat/cow (2A) pose.

## 7) Downward facing dog pose



7A

7B Rock from left foot to right foot, bending knee

7A) From neutral cat/cow (2A) or from plank (5A), slowly push your hips up and back, keeping your head in neutral. You are bearing weight through both hands and the balls of both feet. Index finger pointed forward.

7B) Gently bear weight through the right foot, bending the left knee slightly, but keeping left foot clearly on the floor. This stretches your calf and hamstring of the right leg. Switch back and forth, holding for a couple of seconds each. Return to neutral cat/cow pose (2A).

## Standing Poses

Come up to standing at the front of your mat, however feels right to get up from your knees.

## 8) Mountain pose



8A



8B

8A) Stand with feet together, hips on top of knees and feet, shoulders on top of hips, head neutral. Place hands in prayer in front. Breathe in and out several cycles.

8B) Reach your arms above head, keeping hands in prayer. Gently take your gaze up toward your hands if it feels ok to do so. You can gently extend (arch) your back to naturally match this motion, but do not intentionally try to arch your back. Allow it to happen just through the reaching.

### 9) Warrior 1 pose



Step back the right foot, bending the left knee. Do not let the knee go in front of the ankle. It should be on top of the ankle or behind it. The right foot should be turned to 45 degrees. Both hands above head with gaze forward or slightly up. This pose creates a slight twist in the spine as the shoulders are squared to the front. Breathe a few cycles, then switch to the other leg in front.

### 10) Warrior 2 pose



From Warrior 1, just pivot the back foot (left) to 90 degrees, keeping the front knee (right) bent and in same position over ankle. The body slightly turns to the left. Arms reach out in front and back, opening the chest to the side. Breathe in and out for a few cycles, then switch lead legs. Return to mountain pose (8A).

**11) Forward fold pose** – If this causes nerve sensations such as burning, pain, numbness, or electrical shock feeling, do not do it. You will need to modify it so hands are on a much higher surface.



11A

DAVID MARTINEZ

11B



11C

11A) Gently fold forward, placing your hands on your shins. It is OK to bend your knees if your hamstrings are tight. Try to lengthen your back as you breathe in.

11B) Gently fold further, placing hands on blocks or stool. Hold as you breathe in and out.

11C) Only if you tolerate A and B well, gently fold further so hands touch the floor. Hold as you breathe in and out. Return to 11A and then up to Mountain pose (8A).

### **Mat Poses and Relaxation**

From Mountain pose (8A), come down to the floor any way that is comfortable for you, and sit on your bottom at the front of the mat in Easy pose (1A).

## **12) Hip opening pose**



12A



12B

12A) Sit on those same sit bones as easy pose. Keeping your back straight, open your legs apart, allowing your feet to be out in front of you. Place your hands on your ankles. This creates a diamond with your feet, knees, and groin. The woman in this pic has them closer in than I like. Slide your feet toward the front more, lengthening the diamond. Just breathe in and out here. You will feel an opening in your hip joint and pelvic area.  
 12B) Bring the feet in closer to the groin, closing the diamond. Place your hands on your feet. You will feel this as stretching to your inner thigh. Close your knees and lie back on your back.

### 13) Knees to chest pose



Lying on your back, draw your knees into your chest. Gently place hands on each knee or wrap over the knees as in this picture. You may want to roll side to side, massaging your hips and low back on the floor. From this, place your feet on floor, allowing your knees to point toward the ceiling.

### 14) Bridge pose



14A

How to Do a Bridge

14B



14A) Lay on your back with knees up and feet on floor. Gently move your pelvis from neutral to tilted, as you press your low back into the mat, then tilt the other way as you lift your low back off the mat. These are very small movements, you can barely see.  
 14B) Slide your arms down by your sides, palms down on mat. Gently roll your spine up from the bottom, one vertebrae at a time, until your pelvis lifts on the mat and creates a bridge as in this picture. Hold and breathe for a few cycles. Then reverse the roll and lower it back down to the mat. Repeat 2 or 3 times. Bring your knees back into your chest.

### 15) Spinal twist pose



15A



15B



15C

15A) Do knee to chest post again, rolling around on low back.

15B) Gently roll both knees to the left. You may need to rest them on a pillow or block if you cannot tolerate that much motion in your back and hips to rest them on the floor. Stretch both arms out on the mat in a “T”. Turn your head to the opposite side if that feels OK. Otherwise, keep it neutral. Hold and breathe, then switch directions.

15C) Over time, progress to knees to the floor if that feels good. Return to knees to chest pose and give your knees a hug.

### 16) Relaxation and cool down pose



Just lie on your back if it feels OK. Stretch your legs out and your arms out, allowing them to rest naturally. Stay here 3-5 minutes or as long as you like; breathing, and noticing anything new about your body from the exercises.

## Week 7

### **Student Instructional Objectives**

- 1) Summarize the body's physiological and psychological response to stress.
- 2) Discuss the general role of brain structures involved in managing stress.
- 3) Discover the influence mindfulness has on emotion regulation
- 4) Evaluate personal stressors and typical coping mechanisms.
- 5) Practice the mountain meditation.

### **Required materials**

- 1) Yoga mat

### **Content**

Assignment completion check – practice log and “Embodied Activities and Learning” journal entry

Introduction – take a breath, say name and one stressor immediately being experienced

Group process – share response, concerns, and insights realized in last week's formal and informal practice and readings; share thoughts and/or insights discovered through “Viewing Reflection” and “Embodied Activities and Learning” journal.

Mindfulness activity – guided participation in mountain meditation

Lecture/Discussion – fight or flight response; amygdala; flipped lid image; anterior cortex; maladaptive coping; effects of sustained stress on body and mental health; the effect of mindfulness on emotion regulation

### **Assignments to complete this week**

Materials: bring yoga mat to next class

Daily Practice Log: (hand in at beginning of next class)

Formal practice (5 days required)

1. Mountain meditation
2. Mindful breathing
3. Yoga Meditation
4. Your choice
5. Your choice

Informal practice (2 required)

Required observations/comments:

1. Make one of your informal practices involve interaction with other people.
2. Notice any stress symptoms that arise and how you respond to them.

Readings:

1. Full Catastrophe Living, pp. 287-334 (Stress and reactivity)

2. Goleman, D. (1995). Anatomy of an emotional hijacking. In *Emotional intelligence* (10<sup>th</sup> ed.), (13-29). New York, NY: Bantam Books.
3. Hölzel, B. K., Lazar, S. W., Gard, T., Schuman-Olivier, Z., Vago, D. R., & Ott, U. (2011). How does mindfulness meditation work? Proposing mechanisms of action from a conceptual and neural perspective. *Perspectives on Psychological Science*, 6(6), 537-559. doi:10.1177/1745691611419671

**Read only pages 543-547, stop at Changes in Perspective on Self.**

Readings Quiz: (complete online by 11:59 pm on day before next class)

Journal Assignment: (bring to next class for completion check)

“My Stressors and Coping Mechanisms”

As a handwritten journal entry, discuss what constitutes a stressor in your life. How does stress feel to you? Do bad stress and good stress feel differently, how? How do you typically cope with short term stress? How do you cope with sustained stress?

Mountain Meditation – Jon Kabat-Zinn

<https://soundcloud.com/devicer23/01-jon-kabat-zinn-mountain>

## Week 8

### Student Instructional Objectives

- 1) Apply the practice of acknowledging stress, toward managing it.
- 2) Discover the role of mindfulness in adaptive coping
- 3) Evaluate the effectiveness of mindfulness in emotion regulation
- 4) Practice 3 mini mindfulness meditations
- 5) Assess room for change in current management of stress

### Content

Assignment completion check – practice log and “My Stressors and Coping Mechanisms” journal entry

Introduction – take a breath, say name and one stressor immediately being experienced

Group process – share response, concerns, and insights realized in last week’s formal and informal practice; share thoughts and/or insights discovered through “My Stressors and Coping Mechanisms” journal assignment.

Mindfulness activity – guided participation in single nostril breathing

Application activity – finger traps exercise

Lecture/Discussion – adaptive coping; acknowledging and naming stressors and stress symptoms; practice, practice, practice; brain structural changes over time; turning toward the stressor versus away from it; parasympathetic nervous system

Mindfulness activity – guide participation in 2-minute stretch

Mindfulness activity – guided participation in the STOP exercise

### **Assignments to complete this week**

Materials: bring yoga mat to next class

Daily Practice Log: (hand in at beginning of next class)

Formal practice (5 days required)

1. Morning stretch
2. Mindful breathing
3. Sounds, thoughts, and emotions meditation
4. Body Scan (experiment with leaning into any discomfort vs immediately avoiding it)
5. Your choice

Informal practice (2 required)

Required observations/comments:

1. Increase the number of people or stressors in one of your informal practices.
2. Pay attention to your timing in feeling vs. acknowledging symptoms of stress. Does it make a difference to acknowledge sooner vs. after several bodily responses have occurred?

### Readings:

1. Full Catastrophe Living, pp. 335-349 (Responding to Stress)
2. Halland, E., de Vibe, M., Solhaug, I., Friborg, O., Rosenvinge, J. H., Tyssen, R.,...Bjorndal, A. (2015). Mindfulness training improves problem-focused coping in psychology and medical students: Results from a randomized controlled trial. *College Student Journal*, 49 (3), 387-398. Retrieved from <http://www.projectinnovation.com/college-student-journal.html>.

Assignment: (APA, submit online by 11:59 pm on day before next class)

Using Mini Meditations to Manage Stress”

Incorporate the use of mini mindfulness breaks into your life this week. You can use single nostril breathing, the STOP exercise, the 2-minute stretch, the five senses outline used in the walking meditation earlier, or your own personal technique. In 150-200 words, discuss how and when you acknowledged the need for such an intervention, how it felt to have these options at your disposal, if it was effective or not; and any additional thoughts, insights, etc. Discuss at least 2 situations.

Journal Assignment: (bring to next class for completion check)

“Responding to Unpleasant Events”

Using the unpleasant events calendar, record any unpleasant experiences you encounter this week, noting your accompanying awareness, feelings, bodily sensations, and various responses. Consider the idea of acknowledging the unpleasantness, leaning into it, much like we did with the Chinese finger traps. As a handwritten journal entry, discuss anything you learned about yourself and how you respond to and manage unpleasant things.

The S.T.O.P mini mindfulness practice:  
<http://elishagoldstein.com/videos/the-stop-practice/>

2-minute stretch mini mindfulness practice audio – Larrison

Single nostril breathing mini mindfulness practice audio – Larrison

## Week 9

### Student Instructional Objectives

- 1) Discover the role of mindfulness in reducing suffering
- 2) Employ mindfulness to reduce adventitious suffering in daily life.
- 3) Evaluate capacity to direct and change own life.
- 4) Practice the lake meditation

### Required materials

- 1) Yoga mat

### Content

Assignment completion check – practice log and “Responding to Unpleasant Events” journal entry

Introduction – take a breath, say name and any suffering immediately being experienced

Group process – share response, concerns, and insights realized in last week’s formal and informal practice; share thoughts and/or insights discovered through “Using Mini Meditations” and “Responding to Unpleasant Events” journal entry.

Mindfulness activity – guided participation in the lake meditation

Lecture/Discussion – define suffering; role of mindfulness in reducing suffering; adventitious suffering; the suffering is optional; choosing one’s attitude in all situations; mindfulness cultivates a willingness to rest in the not knowing

### Assignments to complete this week

Materials: bring yoga mat to next class

Daily Practice Log: (hand in at beginning of next class)

Formal practice (5 days required)

1. Lake meditation
2. Yoga meditation or morning stretch
3. Breathing meditation
4. Your choice
5. Your choice

Informal practice (2 required)

Required observations/comments:

1. Make both of your informal practices involve interaction with others.
2. Recognize times of suffering. Was this suffering adventitious? How so?

Readings:

1. Full Catastrophe Living, pp. 269-284 (Connectedness and Interconnectedness)
2. Full Catastrophe Living, pp. 411-429 (Emotional Pain, Suffering) (Optional 430-451)
3. Mindfulness for Beginners, pp. 91-105 (Liberation from suffering)

Midterm Reflections: (submit online by 11:59 pm on day before next class)

This is an opportunity for you to synthesize, very simply, everything you have learned so far about mindfulness, and reflect on any influence it may be having on your life. You are encouraged to draw from all the readings, journals, assignments, discussions, and daily practice, to respond to **both** of the following questions. Treat the questions as separate reflective narratives, almost like a journal, but please submit them within a common title page (Midterm Reflections) and a common reference page for any texts you may include (use in text citations per APA). Use 1-inch margins and 12 pt. Times New Roman font.

1. Read *The Guest House* poem by Rumi (translated by Coleman Barks). In a minimum of 250 words, discuss what the poem means to you, and how it relates to your understanding and practice of mindfulness.
2. In a minimum of 300 words, discuss any changes you have noticed in yourself and your awareness and practice of self-care since the beginning of the course. Discuss which aspects of mindfulness you find the most helpful and why. Include any barriers or challenges you may be experiencing.

### **The Guest House**

This being human is a guest house.  
Every morning a new arrival.

A joy, a depression, a meanness,  
some momentary awareness comes  
as an unexpected visitor.

Welcome and entertain them all!  
Even if they are a crowd of sorrows,  
who violently sweep your house  
empty of its furniture,  
still, treat each guest honorably.  
He may be clearing you out  
for some new delight.

The dark thought, the shame, the malice.  
meet them at the door laughing and invite them in.

Be grateful for whatever comes.  
because each has been sent  
as a guide from beyond.

— Jellaludin Rumi,  
translation by Coleman Barks

Lake Meditation – Jon Kabat-Zinn  
<https://soundcloud.com/devicer23/02-jon-kabat-zinn-lake>

## Week 10

### Student Instructional Objectives

- 1) Discover the influence of mindfulness on self-concept
- 2) Conclude that the mechanisms of mindfulness are highly interrelated
- 3) Assess current practice of self-compassion
- 4) Employ the definition and elements of self-compassion in daily life
- 5) Practice the loving kindness meditation
- 6) Practice the self-compassion break

### Required materials

- 1) Yoga mat

### Content

Assignment completion check – practice log

Introduction – take a breath, say name and first compassionate thought about yourself that comes to mind.

Group process – share response, concerns, and insights realized in last week’s formal and informal practice; share thoughts and/or insights discovered through completing the midterm essays.

Mindfulness activity – guided participation in loving kindness meditation

Lecture/Discussion – mindfulness and self-concept research; a different way of understanding “I” helps diminish the power of repetitive habits that may not be serving us well; mindfulness as a component of self-compassion; mindfulness synonymous with heartfulness; self-compassion is not self-pity, self-indulgence, or self-esteem

Mindfulness activity – guided participation in self-compassion break

### Assignments to complete this week

Materials: bring yoga mat to next class

Daily Practice Log: (hand in at beginning of next class)

Formal practice (5 days required)

1. Loving kindness meditation
2. Yoga meditation or morning stretch
3. Your choice
4. Self-compassion break
5. Your choice

Informal practice (3 required)

Required observations/comments:

1. Make two of your informal practices involve interaction with others.
2. Observe compassion toward yourself. When do you struggle with this?
3. Look for opportunities to express compassion to yourself and others.

Readings:

1. Hölzel, B. K., Lazar, S. W., Gard, T., Schuman-Olivier, Z., Vago, D. R., & Ott, U. (2011). How does mindfulness meditation work? Proposing mechanisms of action from a conceptual and neural perspective. *Perspectives on Psychological Science*, 6(6), 537-559. doi:10.1177/1745691611419671  
**Read 4. Change in perspective on the self on page 547 through the end.**
2. Neff, K. D., Dahm, K. A. (2015). Self-compassion: What it is, what it does, and how it relates to mindfulness. In B. D. Ostafin, M. D. Robinson, & B. P Meier (Eds.), *Handbook of mindfulness and self-regulation* (pp. 121-140). New York, NY: Springer.
3. Kabat-Zinn, J. (2005). Loving kindness meditation. In *Wherever you go, there you are: Mindfulness meditation in everyday life* (pp.162-169). New York, NY: Hatchett Books.

Readings Quiz: (complete online by 11:59 pm on day before next class)

Journal Assignment: (bring to next class for completion check)

“How Self-Compassionate Am I?”

Use the provided list of questions to explore the manner in which you show compassion to yourself. As a handwritten journal entry, answer the questions, discussing any insights or intentions toward approaching this area of your life differently.

**Exercise 1 How self-compassionate are you?**

**How do you typically react to yourself?**

- What types of things do you typically judge and criticize yourself for (appearance, career, relationships, parenting, etc.)?
- What type of language do you use with yourself when you notice some flaw or make a mistake (do you insult yourself, or do you take a more kind and understanding tone)?
- When you are being highly self-critical, how does this make you feel inside?
- When you notice something about yourself you don't like, do you tend to feel cut off from others, or do you feel connected with your fellow humans who are also imperfect?
- What are the consequences of being so hard on yourself? Does it make you more motivated and happy, or discouraged and depressed?

How do you think you would feel if you could truly love and accept yourself exactly as you are? Does this possibility scare you, give you hope, or both?

**How do you typically react to life difficulties?**

How do you treat yourself when you run into challenges in your life? Do you tend to ignore the fact that you're suffering and focus exclusively on fixing the problem, or do you stop to give yourself care and comfort?

Do you tend to get carried away by the drama of the situation, so that you make a bigger deal out of it than you need to, or do you tend to keep things in balanced perspective?

Do you tend to feel cut off from others when things go wrong, with the irrational feeling that everyone else is having a better time of it than you, or do you get in touch with the fact that all humans experience hardship in their lives?

If you feel that you lack sufficient self-compassion, check in with yourself – are you criticizing yourself for this too? If so, stop right there. Try to feel compassion for how difficult it is to be an imperfect human being in this extremely competitive society of ours. Most of us live in cultures that do not emphasize self-compassion, quite the opposite. We're told that we're being lazy and self-indulgent if we don't harshly criticize ourselves. We're told that no matter how hard we try; our best just isn't good enough. It's time for something different. We can all benefit by learning to be more self-compassionate, and now is the perfect time to start.

Kristen Neff, Ph.D.

[http://facesconferences.com/wp-content/uploads/2012/10/Neff-Exercises\\_to\\_Increase\\_Self-Compassion.pdf](http://facesconferences.com/wp-content/uploads/2012/10/Neff-Exercises_to_Increase_Self-Compassion.pdf)

Self-compassion break meditation – Kristen Neff

<https://mindfulness Exercises.com/genre/compassion/>

Increasing Loving Kindness – Sean Fargo

<https://mindfulness Exercises.com/genre/love/>

## Week 11

### Student Instructional Objectives

- 1) Discover the influence beliefs, attitudes, thoughts and emotions, can have on well-being
- 2) Discuss 3 thought patterns that contribute to health
- 3) Describe how a person's response to stress can predict health outcomes
- 4) Practice translating knowledge into daily practice
- 5) Practice the gratitude meditation

### Required materials

- 1) Yoga mat

### Content

Assignment completion check – practice log and “How Self-Compassionate Am I?” journal entry.

Introduction – take a breath, say name and one positive thought currently experienced

Group process – share response, concerns, and insights realized in last week’s formal and informal practice; share thoughts and/or insights discovered through completing the “How Self-Compassionate Am I” journal entry.

Mindfulness activity – guided participation in a gratitude meditation

Lecture/Discussion – optimism/pessimism; self-efficacy; hardiness; sense of coherence; stress and illness; personality and attitude and illness; role of emotions in health; prosocial emotions

### **Assignments to complete this week**

Materials: bring yoga mat to next class

Daily Practice Log: (hand in at beginning of next class)

Formal practice (5 days required)

1. Gratitude meditation
2. Yoga meditation or morning stretch
3. Your choice
4. Your choice
5. Your choice

Informal practice (3 required)

Required observations/comments:

1. Make two of your informal practices involve interaction with others.
2. Observe your attitude toward tasks this week. Is gratitude something that immediately pops into your mind or does it require intentionality?
3. Observe your attitude toward others. How does gratitude enter the equation?

Readings:

- 1.. Full Catastrophe Living, pp. 242-268

Assignment: (APA, submit online by 11:59 on day before next class)

“Mindful Driving”

This is going to be a challenge! This week, make a commitment to complete all of your local driving in complete silence (alone driving that is...you can talk to your passengers ☺). Every time you get in the car, be intentional about not listening to music and not checking your phone. Focus only on the driving experience, how the seat feels, tension in your body, how the steering wheel feels, the view/scenery, etc. If your brain begins planning tonight’s dinner or worrying about the test you had this morning or replaying the events of a car speeding by you, gently bring it back to just driving. In a minimum of 250 words, discuss your experience. Include how you felt upon arriving at your destination, etc.

Journal Assignment: (bring worksheet and journal to next class for completion check)

“Being Grateful for the Small Things”

Using the provided worksheet, record two “small” things each day for which you are grateful. These are not meant to be the “larger” things like family, job, home, etc., but rather

the small things that we often take for granted because we do not notice them. Perhaps they are things that support our existence in small but vital ways. In the comments section, make note of any feelings or emotions associated with these observations, any negative experiences avoided or good saves because of these small things, and any insights or lessons learned. As a handwritten journal entry, discuss your experience and anything gained from it.

#### Being Grateful for the Small Things

Monday – I’m grateful for:	Comments
1.  2.	
Tuesday, I’m grateful for: 1.  2.	
Wednesday, I’m grateful for: 1.  2.	
Thursday, I’m grateful for: 1.  2.	
Friday, I’m grateful for: 1.  2.	
Saturday, I’m grateful for: 1.  2.	
Sunday, I’m grateful for: 1.  2.	

Opening to Gratitude Meditation – Sean Fargo

<https://mindfulnessexercisess.com/genre/gratitude/>

Click on “Opening to Gratitude by Sean Fargo”. This meditation has subtle background sounds.

## Week 12

### Student Instructional Objectives

- 1) Discover the influence mindfulness has on communication
- 2) Practice the complex act of listening
- 3) Apply mindful speaking and listening strategies
- 4) Become familiar with four key practices in mindful communication
- 5) Practice a listening meditation

### Required materials

- 1) Yoga mat

### Content

Assignment completion check – practice log and “Being Grateful” journal entry.

Introduction – take a breath, say name and first sound you are currently hearing.

Group process – share response, concerns, and insights realized in last week’s formal and informal practice; share thoughts and/or insights discovered through the “Being Grateful” journal activity and the “Mindful Driving” assignment.

Application activity – Not listening or ABC listening scenario

Mindfulness activity – guided participation in a listening meditation

Lecture/Discussion – mindful vs mindless listening; obstacles to listening; how perspectives and bias influence what we hear; poor listening habits; components of effective listening; types of listening responses; mindfulness and supportive communication; mindfulness helps develop patient-centered communication

Application activity – 3/1/2-minute listening scenario

### Assignments to complete this week

Materials: bring yoga mat to next class

Daily Practice Log: (hand in at beginning of next class)

Formal practice (5 days required)

1. Listening meditation
2. Yoga meditation or morning stretch
3. Your choice
4. Your choice
5. Your choice

Informal practice (3 required)

Required observations/comments:

1. Make all 3 of your informal practices involve interaction with others.
2. Observe your communication. How well do you listen? How well do others listen?

3. Try applying mindful communication strategies. Do these make any difference?

Readings:

1. Omilion-Hodges, L. M., Swords, N. M. (2016). Communication that heals: mindful communication practices from palliative care leaders. *Health Communication, 31*(3), 328-335. doi:10.1080/10410236.2014.953739
2. Huston, D. C., Gardland, E. L., & Farb, N. A. S. (2011). Mechanisms of mindfulness in communication training. *Journal of Applied Communication Research, 39* (4), 406-421. doi: 10/1080/00909882.2011.608696
3. Adler, R. B., Rosenfeld, L. B., & Proctor, R. F. (n.d.) Chapter outline. In *Interplay: The process of interpersonal communication* (12<sup>th</sup> ed.) (chapter 7). Retrieved from: <http://global.oup.com/us/companion.websites/9780199827428/student/chapt7/outline/>

Readings Quiz: (complete online by 11:59 pm on day before next class)

Assignment: (submit online by 11:59 pm on day before next class)

Listening Reflection”

This exercise is intended to help you hear without judgement or bias from past experiences. Music is one of the most thought and feeling provoking forms of sensory input. For this assignment, try to listen to a piece of music from a neutral standpoint, with present awareness not influenced by preconception. Choose a song that you have **never heard**. Close your eyes and listen via headphones/ear buds. Avoid judging the song based on genre, title, artist name, etc. Only hear it, the different instruments, vocals, beat, etc. Allow yourself to experience this journey of sound for the whole song. Share your experience in a 150-word reflection. Include title, genre, and artist of song; and your thoughts, feelings, and insights.

## Week 13

### Student Instructional Objectives

- 1) Describe the stress often associated with eating and sleeping
- 2) Discuss the impact food choices have on health
- 3) Evaluate current sleeping and eating habits
- 4) Discover the role mindfulness can serve toward healthy eating and sleeping
- 5) Apply mindful eating and sleeping strategies
- 6) Practice an eating meditation
- 7) Practice a meditation for sleep

### Required materials

- 1) Yoga mat

### Content

Assignment completion check – practice log.

Introduction – take a breath, say name and how you currently feel, related to hunger or sleep

Group process – share response, concerns, and insights realized in last week’s formal and informal practice; share thoughts and/or insights discovered through the “Listening Reflection” assignment.

Application activity – BASICS of mindful eating

Lecture/Discussion – habits and attachments to sleep and eating rituals; fighting sleeplessness vs turning toward it in awareness; the use of the body scan toward falling asleep and falling awake; watching with awareness, our thoughts and cravings toward food; embracing sleeping and eating struggles as opportunities to practice

Mindfulness activity – Guided participation in an eating meditation

### **Assignments to complete this week**

Materials: bring yoga mat to next class

Daily Practice Log: (hand in at beginning of next class)

Formal practice (5 days required)

1. Eating meditation
2. Meditation for sleep if you need it or
3. Yoga meditation or morning stretch
4. Your choice
5. Your choice

Informal practice (3 required)

Required observations/comments:

1. In addition to your formal eating meditation this week, make one of your informal practices be during a social eating situation.
2. Pay attention to signals for basic needs (hunger, thirst, sleep). Can you differentiate between them?
3. Try observing food cravings as thoughts that can just be observe in awareness until they dissipate vs. having to respond to them.

Readings:

1. Full Catastrophe Living, pp. 470-477 (Sleep Stress)
2. Full Catastrophe Living, pp. 516-537 (Food Stress)

Assignment: (APA, submit online by 11:59 pm on day before next class)

“Taking the Stress Out of Not Sleeping”

This week, take a look at your sleep habits. If you are consistently sleeping well, discuss your typical routine, hours of sleep, and feelings of adequately rested the next day. If you do experience episodes of sleeplessness, try the strategies described in the Sleep Stress chapter of embracing that period of wakefulness with full awareness, while at the same time, not worrying about the potential impact of missed hours on the next day. You can also try using the body scan or meditation for sleep to get to or go back to sleep. This will require the attitudes of patience, trust, and acceptance. Give it a try. In 100 words, discuss your experience.

Journal Assignment: (bring to next class for completion check)

“A Mindful Attitude Toward Food”

This week, use the “hints and suggestions for mindfulness of food and eating”, at the end of the Food Stress chapter, pp. 529-530; and the “BASICS of mindful eating” handout as guides. Explore these strategies for approaching food in a mindful, less emotional way. As a handwritten journal entry, discuss your experience, any struggles, successes, concerns, etc. If you enjoy a healthy and satisfying relationship with food, reflect and discuss what attitude and approach allows you to maintain this positive relationship.

### **BASICS of Mindful Eating**

Here are the BASICS of Mindful Eating. These are guidelines (not rules) to help you become conscious about how, what, when and why you eat. Follow them as best you can and as often as you can, knowing that there will be times when it will be next to impossible to eat this way.

However, there will be lots of opportunities for you to practice (we eat every day). Let these BASICS guide you to a way of eating that pleases your taste buds and supports your body’s health. Play with taking one BASIC a week and letting it guide how you eat.

### **BASICS of Mindful Eating**

**B**reathe and **B**elly Check for hunger and satiety before you eat.

Assess your Food

Slow Down

Investigate your hunger and satiety throughout the meal

Chew Your Food Thoroughly

Savor Your Food

### **B – Breathe and Belly Check for hunger and satiety before you eat.**

First of all, take a few deep breaths as you begin to check in with your belly. Are there sensations of physical hunger? How hungry are you? What are you hungry for? Is there a particular type of food you’d like to have? You might want food. You might be thirsty. You might be hungry for something entirely different than food (walking, stretching, more deep breaths). Listen to what your body is telling you. General rule: eat when you’re hungry, don’t eat when you’re not hungry. Find out what your body is telling you by breathing and doing a belly check.

### **A – Assess your Food**

What does it look like? Notice the colors of the food. Does it look appealing? What does it smell like? Where does it come from? Is it a food you can recognize (e.g. natural and unprocessed) or is it a food-like substance (e.g. so processed you don’t know where it comes from)? Ask yourself if this is the food you really want. You don’t have to take a lot of time with this. A brief pause to assess your food can give you lots of information about it.

### **S – Slow Down**

Slowing down while you are eating can help you enjoy your food more fully. Slowing down also helps you be aware of when you’re getting full and to notice when the body has had

enough. Simple methods to help you slow down include putting down your fork or spoon between bites, pausing and taking a breath between bites, and chewing your food completely.

### **I – Investigate your hunger throughout the meal**

To be a mindful eater, it is important to be aware of your distractions and to keep bringing your attention back to eating, tasting, and assessing your hunger and satiety throughout the meal. It is particularly useful to stop half-way through your meal and take a moment to check in with your belly. You may discover that you're no longer hungry even though there's food on your plate or you may discover you don't even like the food you're eating. Give yourself permission to stop or to continue based on how hungry you are, not old rules like "you need to clean your plate."

### **C – Chew Your Food Thoroughly**

Chewing your food thoroughly help you to slow down and your body to digest the nutrients from your food more efficiently. As a result, you will have time to really taste your food and be tuned into the signals that your hunger is dissipating. The sooner you are aware of satiety, the less likely it will be that you will over-eat.

### **S – Savor Your Food**

Savoring your food means taking time to choose food you really like and food that would satisfy you right now. To truly savor your food, you choose food that honors your taste buds and your body.

Become fully present for the experience of eating and the pleasure that it can bring. Let all of your attention be on the complete range of sensations available in each bite and feel the joy. If you can't savor it, why eat it?

T. E. Atkins Wellness Program, University of Missouri System (n. d.) The basics of mindful eating [Web log post]. Retrieved from:  
<https://www.umsystem.edu/newscentral/mindfuleating/basics-of-mindful-eating/>

Guided Mindfulness Meditation for Sleep – Mindful Peace Journey  
<https://www.youtube.com/watch?v=ROzhPtg-91g>

## **Week 14**

### **Student Instructional Objectives**

- 1) Develop endurance and tolerance for extended meditation time
- 2) Discover the benefits of extended time in silence
- 3) Evaluate feelings of being away from electronic devices
- 4) Develop capacity for turning inward to self for learning and growth
- 5) Practice guiding own mindfulness practice

### **Required materials**

- 1) Yoga mat

- 2) A light snack and non-alcoholic beverage
- 3) Any supportive materials, such as yoga blocks, blankets, pillows/bolsters

### **Content**

3 Hour Silent Retreat – This will take the place on Saturday, April 21 from 9am-noon. It will be held at Nancy Green's beautiful home. Attendance is required. This is an opportunity for you to experience extended time in meditation, experience extended time in silence, and have a break from your electronic devices. You will be guided in meditations by me and a couple of guest mindfulness teachers and will also have the opportunity to guide yourself. Conversational talking and eye contact is to be halted until after the retreat when you return back to your regular day. A light breakfast will be provided. Please bring your yoga mat and any additional props (blankets, blocks, bolsters, etc.) you would like to use.

### **Assignments to complete this week**

#### Reading:

1. Full Catastrophe Living, pp. 132-146 (A Day of Mindfulness)

Please read this well before our retreat day. This will give you an idea of what to expect; and curb any anxiety that you may have developed in anticipation, by not knowing. It is an enjoyable and very worthwhile experience.

Materials: bring yoga mat to next class

#### Daily Practice Log: (hand in at beginning of next class)

Formal practice (5 days required)

1. Yoga meditation or morning stretch
2. Sounds, thoughts, and emotions meditation
3. Create your own meditation
4. Your choice
5. Your choice

Informal practice (3 required)

Required observations/comments:

1. Try to spend all 3 of your informal practices in alone time, such as driving, housework, leisure, etc.
2. Embrace all the sensations you experience. Expand your awareness to include as many as you can.
3. Make note of any new sensations or experiences you recognized by opening your heart and mind to them.

Assignment: (APA, submit online by 11:59 pm on day before next class)

“Silent Retreat Reflection”

In a minimum of 200 words, describe your experience at the silent retreat. Discuss thoughts and feelings related to sustained silence, time away from technology, having different guides, physical comfort, attitude, and anything else you would like to include.

## Week 15

### **Student Instructional Objectives**

- 1) Summarize mindfulness precepts
- 2) Summarize the seven attitudes of mindfulness
- 3) Evaluate course experience
- 4) Understand requirements for final paper

### **Required materials**

- 1) Yoga mat

### **Content**

Assignment completion check – practice log and “A Mindful Attitude Toward Food” journal entry.

Introduction – take a breath, say name and first sound you are currently hearing.

Group process – share response, concerns, and insights realized in last week’s formal and informal practice; share thoughts and/or insights discovered through the “Taking the Stress Out of Not Sleeping” activity and the “A Mindful Attitude Toward Food” journal entry.

Group process – share responses and experiences with silent retreat.

Lecture/Discussion – Precepts of mindfulness; seven attitudes; instructions for completing self-care inventory and requirements for final paper.

Exploration – Complete 2<sup>nd</sup> Five Facet Mindfulness Questionnaire (teacher collects and scores, keeps)

Mindfulness activity – guided participation in group choice of meditation

### **Assignments to complete this week**

Daily Practice Log: (hand in to Katrina by noon on May 2nd)

Formal practice (5 days required)

1. Yoga meditation or morning stretch
2. Sounds, thoughts, and emotions meditation
3. Mindful observation
4. Mindful breathing
5. Body scan

Informal practice (3 required)

Required observations/comments:

1. Be intentional about making all 3 of your informal practices involve some aspect of self-care.
2. Observe your attention to your self-care.
3. Observe your attitude toward your self-care.

Optional Reading:

1. Sharma, D. (2016). An introduction to clinical mindfulness. *Day Surgery Australia*, 15 (2), 3-7.

Final Paper Requirements: (submit online by 11:59 pm on May 2, 2018)

This is an opportunity for you to recognize changes in trait mindfulness and self-care and reflect on your overall experience in the course. You will complete a 2nd Five Facet Mindfulness Questionnaire (in class), a 2<sup>nd</sup> Self-Care Inventory (at home), and a reflective paper for the final assessment. The paper is to be written in General APA format (see Purdue Owl for paper sections and structure <https://owl.english.purdue.edu/owl/resource/560/01/>). The paper should be double-spaced, written in 12 pt. Times New Roman font, have 1-inch margins, have in text citations, and be a minimum of four pages in length. The title, abstract, and reference pages are in addition to this page count.

Using the provided rubric as a guide, you are encouraged to draw from all readings, journals, assignments, discussions, daily practice, and self-assessments to write a reflective paper that responds to the following four questions. Do not answer each question individually. I am looking for a well-organized and integrated discussion of your experience.

1. How has your understanding of mindfulness and the integration of it into your daily life changed over the length of this course, and how has this affected you?
2. How has your understanding of self-care and your own self-care habits changed over the length of this course, and how has this affected you?
3. What aspects of the course have contributed the most toward these changes?
4. How do you see yourself continuing the practice of mindfulness in your personal and/or professional life?

**Week 16**

Exam Week:

Complete Self-Care Assessment

Final Reflection Paper Due

Appendix C

CCHS Common Course Syllabus

**Cabarrus College of Health Sciences  
Concord, North Carolina**

**Common Course Syllabus**

**IHS 350  
Mindfulness for Self-Care**

**Course Description:**

Mindfulness for Self-Care is designed to introduce healthcare students to the art and science of mindfulness, and its role in reducing clinician burnout, through enhanced self-care. Texts provide students the foundational understanding upon which to build a personal practice while supplemental scholarly work from the fields of medicine, nursing, education, psychology, and allied health provide a reference point through which students can make meaning of their mindful experiences. Weekly formal and informal practice offers students a consistent and safe place to develop an awareness of their own bodies, thoughts, and feelings that can translate into embodied knowledge, enhanced self-regulation, effective communication, improved self-care, and overall well-being. Experiential assignments, journaling, and a group experience encourage students to reflect while discovering the many ways mindfulness permeates, positively influences, and reduces suffering in their lives and the lives of others.

**Course Format:** Hybrid. On-campus weekly class time of 90 minutes.

**Pre-requisites:** None

**Semester Class Contact Hours:** 48

**Total Semester Hour Credits:** 3

**Student Learning Outcomes:**

- Recognize the value of self-care for wellness and prevention of burnout in healthcare professionals.
- Utilize the practice of mindfulness toward assessing and improving personal self-care habits.
- Apply the precepts and attitudes of mindfulness to everyday life.
- Discover the positive relationship between systematic and routine mindfulness practice and self-regulation.
- Examine the synergetic relationship between mindfulness and self-compassion, and their functions in reducing suffering.
- Employ embodied learning strategies toward increasing awareness, knowing, and overall well-being.
- Relate research from other fields of study toward an ever-expanding understanding of mindfulness.

**College Wide Grading Scale:**

A = 93-100	C = 73-76
A- = 90-92	C- = 70-72
B+ = 87-89	D+ = 67-69
B = 83-86	D = 63-66
B- = 80-82	D- = 60-62
C+ = 77-79	F = less than 60

**Academic dates are published in the College Catalog, Student Handbook, and on the College Website.**

**Student Assessment of Instruction (SAI):**

Students play an integral role in the academic life of the College through their participation in the evaluation of instruction through the Student Assessment of Instruction (SAI) process. Student participation in the SAI process is critical to the College's commitment to quality teaching and academic excellence. Students are required to participate in the process with constructive feedback that is relevant to teaching and course content. Instructors read and seriously take student feedback to heart. Student feedback can lead faculty to revise teaching methods, change textbooks, revise assignments and make other changes to enhance student learning.

Evaluations will be administered through Canvas, with notifications delivered through Canvas. Any personal-identifying information is stripped from the evaluation to preserve student anonymity. All survey data is property of Cabarrus College of Health Sciences.

**Attendance Requirements:**

The Cabarrus College faculty expect students to consistently attend and participate in all academic courses in which they are registered. Attendance refers to all required on-campus classes, laboratory sessions, clinical/fieldwork and related experiences, as well as active participation in distance education activities as outlined in the course syllabi. Specific course attendance requirements are left to the discretion of the instructor of record including determining the need for make-up days due to personal illness or other extenuating circumstances. Absences interfere with the student receiving the full benefit of the educational experience and therefore should only occur in emergency situations such as personal illness, family illness, or death of a close family member.

Course faculty maintain the right to administratively withdraw a student from their course when they fail to comply with academic requirements including, but not limited to:

1. Failing to attend classes for a consecutive time-period equal to 12.5% of the course duration.
2. Missing an excessive amount of scheduled class time equal to 25% of the course duration.
3. Failing to maintain an online presence as expected for the course and College activities.

In order to meet academic attendance expectations, all students must have access to the internet, a telephone, Cabarrus College email, the Learning Management System email, and as applicable, transportation services. All students are expected to keep their contact information up to date in Sonis and check their College email account, personal phone, and the College website for announcements concerning College closings, delays or rescheduling due to inclement weather, faculty absences, and facility closing or other emergencies impacting student attendance.

**Academic Integrity Statement:**

Adherence to high principles of academic integrity is vital to the academic function of the College. All members of the College community bear a responsibility for upholding academic integrity standards which are based upon honesty. Any breach of academic honesty should be regarded as a serious offense. Each student has an obligation to know, understand, and act upon those standards and expectations, including reporting to College officials witnessed acts or knowledge of academic misconduct. Failing to report witnessed acts or knowledge of academic misconduct may be considered a violation of student academic integrity. All students, faculty, and staff are expected to help maintain academic integrity at the College by refusing to participate in, or tolerate, any dishonesty.

**Academic Dishonesty:**

Academic dishonesty violates the College value of integrity designed to promote trust of our graduates within the healthcare community and undermines the learning process. Violations include any actions which attempt to promote or enhance the academic standing of any student by dishonest means. This section describes various ways in which the principles of academic integrity can be violated, however neither the types of violations nor the lists of examples are exclusive.

- I. Plagiarism:** Plagiarism is the use of another person's words, ideas, or results without giving that person appropriate credit. To avoid plagiarism, every direct quotation must be identified by quotation marks or appropriate indentation and both direct quotation and paraphrasing must be cited properly according to the accepted format for the particular discipline or as required by the instructor in a course. Some common examples of plagiarism are:
  - A.** Copying word for word (i.e. quoting directly) from an oral, printed, or electronic source without proper attribution.
  - B.** Paraphrasing without proper attribution, i.e., presenting in one's own words another person's written words or ideas as if they were ones own.
  - C.** Submitting a purchased or downloaded term paper or other materials to satisfy a course requirement.
  - D.** Incorporating into ones work graphs, drawings, photographs, diagrams, tables, spreadsheets, computer programs, or other non-textual material from other sources without proper attribution of credit.
  
- II. Cheating:** Cheating is the use of inappropriate or prohibited materials, information, sources, or aids in any academic exercise. Cheating also includes submitting papers, research results and reports, analyses, etc. as one's own work when they were, in fact, prepared by others. Some common examples are:
  - A.** Receiving research, programming, data collection, or analytical assistance from others or working with another student on an assignment where such help is not permitted.
  - B.** Copying another student's work or answers on a quiz or examination.
  - C.** Using or possessing books, notes, calculators, cell phones, or other prohibited devices or materials during a quiz or examination.

- D. Submitting the same work or major portions thereof to satisfy the requirements of more than one course without permission from the instructors involved.
  - E. Preprogramming a calculator or other electronic device to contain answers, formulas, or other unauthorized information for use during a quiz or examination.
  - F. Acquiring a copy of an examination from an unauthorized source prior to the examination.
  - G. Having a substitute take an examination in one's place.
  - H. Submitting as one's own work a term paper or other assignment prepared by someone else.
- III. Fabrication:** Fabrication is the invention or falsification of sources, citations, data, or results, and recording or reporting them in any academic exercise. Some examples are:
- A. Citing a source that does not exist.
  - B. Making up or falsifying evidence or data or other source materials.
  - C. Falsifying or presenting fictional patient information as real to fulfill requirements for work assigned by individual faculty members or clinical preceptors.
  - D. Falsifying research papers or reports by selectively omitting or altering data that do not support one's conclusions or claimed experimental precision.
- IV. Facilitation of Dishonesty:** Facilitation of dishonesty is knowingly or negligently allowing one's work to be used by other students without prior approval of the instructor or otherwise aiding others in committing violations of academic integrity. A student who intentionally facilitates a violation of academic integrity can be considered to be as culpable as the student who receives the impermissible assistance, even the facilitator does not benefit personally from the violation. Some examples are:
- A. Collaborating before a quiz or examination to develop methods of exchanging information.
  - B. Knowingly allowing others to copy answers to work on a quiz or examination or assisting others to do so.
  - C. Distributing an examination from an unauthorized source prior to the examination.
  - D. Distributing or selling a term paper to other students.
  - E. Taking an examination for another student.
- V. Academic Sabotage:** Academic sabotage is deliberately impeding the academic progress of others.
- Some examples are:
- A. Intentionally destroying or obstructing another student's work.
  - B. Stealing or defacing books, journals, or other library or College materials.
  - C. Altering computer files that contain data, reports or assignments belonging to another student.
  - D. Removing posted or reserve material or otherwise preventing other students' access to it.
- VI. Violation of Research or Professional Ethics:** Violations in this category include both violations of the code of ethics specific to a particular profession and violations of more

generally applicable ethical requirements for the acquisition, analysis, and reporting of research data and the preparation and submission of scholarly work for publication. Some examples are:

- A. Violating a canon of the ethical or professional code of the profession for which a student is preparing.
- B. Using unethical or improper means of acquiring, analyzing, or reporting data in a senior thesis project, a master's or doctoral research project, grant-funded research, or research submitted for publication.
- C. Misuse of grant or institutional funds.
- D. Violating professional ethics in performing one's duties as a Teaching Assistant, Graduate Assistant, or Guided Student Study Leader.

**VII. Violations Involving Potentially Criminal Activity:** Violations in this category include theft, fraud, forgery, or distribution of ill-gotten materials committed as part of an act of academic dishonesty. Some examples are:

- A. Stealing an examination from a faculty member's or College office or from electronic files.
- B. Selling or distributing a stolen examination.
- C. Forging a change-of-grade form.
- D. Falsifying a College transcript.

### **VIII. Sanctions:**

When a faculty member believes a student in their course has engaged in academic dishonesty, the faculty member will inform the student of the allegation with the goal of maintaining an environment that supports integrity and learning, keeping in mind the confidential nature of the matter. The faculty member will consult with their supervisor and/or administration to plan consequences for any violations. Sanctions will depend upon the level of violation. Examples of sanctions include yet are not limited to earning a 0 grade on the assignment, earning an F for the course, probation, suspension, and/or dismissal from the program and/or College. If a student does not agree with the allegation and or consequence, the faculty member will refer the student to the Academic Appeals Policy.

### **E-mail Correspondence Statement:**

Email is a valuable communication tool for issues in this course associated with information and notifications (schedule changes, making appointments, notification of assignments, etc.). When there is a need to resolve differences regarding performance evaluation, grading, or other academic issues communication should be via a scheduled meeting between the faculty and student.

**As a general rule, the instructor will respond to student communications within 48 hours.**

### **Smarthinking:**

All students enrolled at Cabarrus College of Health Sciences may access tutoring services via *Smarthinking* throughout the academic year.

Students access this service by logging into their course on Canvas and clicking on the *Smarthinking* tab. An additional username and password is not needed to access *Smarthinking*.

Student's may utilize *Smarthinking's* following resources:

- **Writing Center** – submit a writing assignment for any class to one of the essay centers
- **Drop in Tutoring Sessions** – connect with an e-structor and interact with a live tutor
- **Scheduled Tutoring** – schedule a personal tutoring session
- **Offline Questions** – submit a question and receive a response within 24 hours
- **Academic Resources** – look for answers to questions before engaging with a tutor
- **Live voice plus whiteboard** – take advantage of a live writing review option for several math subjects.

### **Writing and Formatting Papers:**

Cabarrus College requires students to submit papers using APA style and formatting unless otherwise notified by the instructor. Students are encouraged to consult the following resources when writing papers and crafting citations and references:

- American Psychological Association. (2010). *Publication Manual of the American Psychological Association* (6th ed.). Washington, DC: American Psychological Association.
- American Psychological Association. (2012). *APA style guide to electronic references*. Washington, DC: American Psychological Association.
- Purdue University Online Writing Lab (OWL). (2013). *APA Formatting and Style Guide*. Retrieved from <https://owl.english.purdue.edu/owl/7/14/14>.
- Smarthinking tutoring services and resources

### **Student ID Badge Statement:**

Identification badges must be worn above the waist with picture and name visible at all times while on campus and at clinical agencies by Cabarrus College of Health Sciences faculty, staff and students.

### **Disability Services Statement:**

Students with a physical or mental impairment (a disability for which you believe will require accommodations, assistance with coursework or testing) that substantially limits one or more major life activities as defined under the ADA/504, should contact the Coordinator, Advising and Student Success at 704-403-1616. Please note that students with disabilities must present current and complete documentation to be considered for receipt of accommodations.

### **Disclaimer:**

This syllabus is not a contract. The instructor reserves the right to alter the course requirements, schedule, and/or assignments based on new materials, class discussions, or other legitimate pedagogical objectives. Students will be given notice of relevant changes in class or via e-mail.

## Appendix D

## Five-Face Mindfulness Questionnaire

Please rate each of the following statements using the scale provided. Circle the number below each question that best describes your own opinion of what is generally true for you.

1. When I'm walking, I deliberately notice the sensations of my body moving.

1	2	3	4	5
Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true

2. I'm good at finding words to describe my feelings.

1	2	3	4	5
Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true

3. I criticize myself for having irrational or inappropriate emotions.

1	2	3	4	5
Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true

4. I perceive my feelings and emotions without having to react to them.

1	2	3	4	5
Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true

5. When I do things, my mind wanders off and I'm easily distracted.

1	2	3	4	5
Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true

6. When I take a shower or bath, I stay alert to the sensations of water on my body.

1	2	3	4	5
Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true

7. I can easily put my beliefs, opinions, and expectations into words.

1	2	3	4	5
Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true

8. I don't pay attention to what I'm doing because I'm daydreaming, worrying, or otherwise distracted.

1	2	3	4	5
Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true

9. I watch my feelings without getting lost in them.

1	2	3	4	5
Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true

10. I tell myself I shouldn't be feeling the way I'm feeling.

1	2	3	4	5
Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true

11. I notice how foods and drinks affect my thoughts, bodily sensations, and emotions.

1	2	3	4	5
Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true

12. It's hard for me to find the words to describe what I'm thinking.

1	2	3	4	5
Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true

13. I am easily distracted.

1	2	3	4	5
Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true

14. I believe some of my thoughts are abnormal or bad and I shouldn't think that way.

1	2	3	4	5
Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true

15. I pay attention to sensations, such as the wind in my hair or sun on my face.

1	2	3	4	5
Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true

16. I have trouble thinking of the right words to express how I feel about things.

1	2	3	4	5
Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true

17. I make judgments about whether my thoughts are good or bad.

1	2	3	4	5
Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true

18. I find it difficult to stay focused on what's happening in the present.

1	2	3	4	5
Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true

19. When I have distressing thoughts or images, I “step back” and am aware of the thought or image without getting taken over by it.

1	2	3	4	5
Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true

20. I pay attention to sounds, such as clocks ticking, birds chirping, or cars passing.

1	2	3	4	5
Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true

21. In difficult situations, I can pause without immediately reacting.

1	2	3	4	5
Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true

22. When I have a sensation in my body, it’s difficult for me to describe it because I can’t find the right words.

1	2	3	4	5
Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true

23. It seems I am “running on automatic” without much awareness of what I’m doing.

1	2	3	4	5
Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true

24. When I have distressing thoughts or images, I feel calm soon after.

1	2	3	4	5
Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true

25. I tell myself that I shouldn’t be thinking the way I’m thinking.

1	2	3	4	5
Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true

26. I notice the smells and aromas of things.

1	2	3	4	5
Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true

27. Even when I’m feeling terribly upset, I can find a way to put it into words.

1	2	3	4	5
Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true

28. I rush through activities without being really attentive to them.

1	2	3	4	5
Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true

29. When I have distressing thoughts or images I am able just to notice them without reacting.

1	2	3	4	5
Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true

30. I think some of my emotions are bad or inappropriate and I shouldn't feel them.

1	2	3	4	5
Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true

31. I notice visual elements in art or nature, such as colors, shapes, textures, or patterns of light and shadow.

1	2	3	4	5
Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true

32. My natural tendency is to put my experiences into words.

1	2	3	4	5
Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true

33. When I have distressing thoughts or images, I just notice them and let them go.

1	2	3	4	5
Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true

34. I do jobs or tasks automatically without being aware of what I'm doing.

1	2	3	4	5
Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true

35. When I have distressing thoughts or images, I judge myself as good or bad, depending what the thought/image is about.

1	2	3	4	5
Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true

36. I pay attention to how my emotions affect my thoughts and behavior.

1	2	3	4	5
Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true

37. I can usually describe how I feel at the moment in considerable detail.

1	2	3	4	5
Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true

38. I find myself doing things without paying attention.

1	2	3	4	5
Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true

39. I disapprove of myself when I have irrational ideas.

1	2	3	4	5
Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true

#### Description:

This instrument is based on a factor analytic study of five independently developed mindfulness questionnaires. The analysis yielded five factors that appear to represent elements of mindfulness as it is currently conceptualized. The five facets are observing, describing, acting with awareness, non-judging of inner experience, and non-reactivity to inner experience.

#### Scoring Information:

##### Observe items:

1, 6, 11, 15, 20, 26, 31, 36

##### Describe items:

2, 7, 12R, 16R, 22R, 27, 32, 37

##### Act with Awareness items:

5R, 8R, 13R, 18R, 23R, 28R, 34R, 38R

##### Nonjudge items:

3R, 10R, 14R, 17R, 25R, 30R, 35R, 39R

##### Nonreact items:

4, 9, 19, 21, 24, 29, 33

Baer, R. A. (2006). *Five-facet mindfulness questionnaire* [pdf.]. Retrieved from:

<http://www.ruthbaer.com/academics/FFMQ.pdf>

Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using self-report assessment methods to explore facets of mindfulness. *Assessment, 13*, 27-45.

## Appendix E

## Self-Care Inventory

***Self-Care Inventory***

This self-assessment tool provides an overview of effective strategies to promote self-care. Please complete it based on your current level of participation in each item, not what you have done in the past or hope to do in the future. This tool is for your eyes only; so you can be completely honest, and hopefully use it as a starting point for goal setting, reassessment, and growth. There is no perfect combination or score for which to strive. It is simply an opportunity for you to consider how you care for yourself and if that is currently meeting your overall needs. Fill free to add additional items, make comments. This is your tool. Once you have completed the inventory, add your ratings for each section and record here. These scores are for your own use and reflection. They do not convert to any standardized measurement or scale.

<b>Total Scores</b>	<b>Area of Self-Care</b>
	Physical
	Psychological
	Emotional
	Spiritual
	School/Workplace/Professional

Comments, Insights, Concern, Goals

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### *Self-Care Inventory*

Using the scale below, circle the rating that best describes your frequency with that strategy.

5 = Frequently

4 = Occasionally

3 = Rarely

2 = Never

1 = It never occurred to me

					<b>Physical Self-Care</b>
5	4	3	2	1	Eat regularly - breakfast, lunch, and dinner
5	4	3	2	1	Eat healthy foods
5	4	3	2	1	Exercise consistently - how often, what type?
5	4	3	2	1	Get regular medical care for prevention – breasts, pap, dental, labs
5	4	3	2	1	Get medical care when needed
5	4	3	2	1	Take time off when you are sick
5	4	3	2	1	Engage in physical activity that is enjoyable - dance, swim, garden
5	4	3	2	1	Take time to be sexual
5	4	3	2	1	Get enough sleep – how many hours? Is it enough for you?
5	4	3	2	1	Take vacations
5	4	3	2	1	Take day trips or spontaneous short outings
5	4	3	2	1	Wear clothes you like
5	4	3	2	1	Take time away from technology – phone, computer, tv, radio
5	4	3	2	1	Other:
					<b>Psychological Self-Care</b>
5	4	3	2	1	Make time for self-reflection
5	4	3	2	1	Utilize professional counseling or support group when needed
5	4	3	2	1	Write in a journal
5	4	3	2	1	Read literature unrelated to school or work
5	4	3	2	1	Do something in which you are not the expert or in charge
5	4	3	2	1	Decrease/Manage stress in your life
5	4	3	2	1	Notice inner experiences - listen and recognize thoughts, judgments, beliefs, attitudes, and feelings
5	4	3	2	1	Let others know different aspects about you – communicate needs, wants, and feelings
5	4	3	2	1	Try new things – theatre, auction, museum, cultural exp., sporting event
5	4	3	2	1	Say “no” to extra responsibilities sometimes
5	4	3	2	1	Other:

					<b>Emotional Self-Care</b>
5	4	3	2	1	Allow for quality time with others whose company you enjoy
5	4	3	2	1	Stay in contact with valued others
5	4	3	2	1	Give yourself affirmations and praise
5	4	3	2	1	Love yourself
5	4	3	2	1	Re-read favorite book or re-watch favorite movies
5	4	3	2	1	Identify and engage in comforting activities, objects, people, places
5	4	3	2	1	Allow yourself to express feelings – laugh, cry, anger, etc.
5	4	3	2	1	Be playful
5	4	3	2	1	Other:
					<b>Spiritual Self-Care</b>
5	4	3	2	1	Allow time for reflection
5	4	3	2	1	Spend time in nature
5	4	3	2	1	Participate in a spiritual community
5	4	3	2	1	Be open to inspiration
5	4	3	2	1	Cherish your own optimism and hope
5	4	3	2	1	Be aware of nonmaterial aspects of life
5	4	3	2	1	Cultivate ability to identify what is meaningful and its place in your life
5	4	3	2	1	Meditate/pray/sing
5	4	3	2	1	Contribute to a cause in which you believe
5	4	3	2	1	Read or listen to inspirational literature/music
5	4	3	2	1	Have experiences of awe
5	4	3	2	1	Other:
					<b>School, Workplace, or Professional Self-Care</b>
5	4	3	2	1	Take breaks during the school/workday
5	4	3	2	1	Engage with fellow students/co-workers
5	4	3	2	1	Make quiet time/space to complete tasks
5	4	3	2	1	Participate in projects or tasks that are exciting and rewarding
5	4	3	2	1	Set limits/boundaries with peers, colleagues, and clients
5	4	3	2	1	Balance your workload/day so that no part is “too much”
5	4	3	2	1	Arrange workspace for comfort
5	4	3	2	1	Negotiate needs – flexibility, support of new ideas, benefits, pay
5	4	3	2	1	Get regular supervision, feedback, help, or guidance
5	4	3	2	1	Participate in a peer support group
5	4	3	2	1	Explore a new area of interest in your studies or professional work
5	4	3	2	1	Other:

Adapted from National Alliance on Mental Illness (n.d.) Original source unknown.

## Appendix F

## Three Samples of Weekly Practice Logs

## Week 1 Mindfulness Practice Log

**Formal Practice (5 days required)**

<b>Practice</b>	<b>Day</b>	<b>Time Spent</b>
1. Morning stretch		
2. Morning stretch		
3. Morning stretch		
4. Morning stretch		
5. Morning stretch		

**Informal Practice (2 practices required) – describe activity and time spent**

1.

2.

**Required observations/comments:**

1. Thoughts and feelings associated with designating a time each day for self-care.

2. Notice how your attention comes and goes in informal practice (washing dishes, etc.)

Student Signature \_\_\_\_\_

## Week 4 Mindfulness Practice Log

**Formal Practice (5 days required)**

<b>Practice</b>	<b>Day</b>	<b>Time Spent</b>
1. Sounds, thoughts, and emotions meditation		
2. Morning stretch		
3. Mindful breathing		
4. 5 senses walking meditation		
5. Mindful observation		

**Informal Practice (2 practices required) – describe activity and time spent**

1.

2.

**Required observations/comments:**

1. Recognize instances of “selfing”.

2. Recognize destructive mind states as they arise (greed, aversion, delusion).

Student Signature \_\_\_\_\_

## Week 10 Mindfulness Practice Log

**Formal Practice (5 days required)**

<b>Practice</b>	<b>Day</b>	<b>Time Spent</b>
1. Loving kindness meditation		
2. Yoga meditation or morning stretch		
3. Your choice		
4. Self-compassion break		
5. Your choice		

**Informal Practice (3 practices required) – describe activity and time spent**

- 1.
- 2.
- 3.

**Required observations/comments:**

1. Make two of your informal practices involve interaction with others.
2. Observe compassion toward yourself. When do you struggle with this?
3. Look for opportunities to express compassion to yourself and others.

Student Signature \_\_\_\_\_

## Appendix G

## Quiz Banks

## Question Bank for Week 1 Quiz

1. What can be confusing is that mindfulness is both a \_\_\_\_\_ (mindful practice) and an \_\_\_\_\_ (mindful awareness).
  - a. obligation, destination
  - b. strict discipline, achievement
  - c. bodily experience, out of body experience
  - d. process, outcome
  
2. Attempting to write about mindfulness in an academic and conceptual way is in some ways antithetical to the very nature of mindfulness, which is essentially an \_\_\_\_\_.
  - a. exclusive reality
  - b. ethereal meditative state
  - c. experiential process
  - d. exact science
  
3. Knowing the state of your mind in this moment, without \_\_\_\_\_ it, \_\_\_\_\_ it, or trying to change it, is mindfulness.
  - a. confusing, bragging about
  - b. judging, evaluating
  - c. deceiving, condemning
  - d. judging, pressuring
  
4. Bhikkhu referred to mindfulness in its \_\_\_\_\_ as *bare attention*.
  - a. simplest form
  - b. most complex form
  - c. misunderstood form
  - d. theoretical light
  
5. What bare attention refers to is that we have \_\_\_\_\_ our conditioned “emotional reactions, evaluations, judgment, and conceptual overlays”.
  - a. twisted
  - b. modified
  - c. removed
  - d. added
  
6. From a mindful perspective, our \_\_\_\_\_ arises out of our reactions and judgments about what is present, as opposed to what is actually present.
  - a. happiness
  - b. suffering
  - c. doubt

d. humility

7. Mindfulness offers a different way of relating, a different way of being. It involves becoming aware of our tendencies to \_\_\_\_\_ how things are and our constant attempts to \_\_\_\_\_ the boulders.

- a. embrace, balance
- b. duplicate, break down
- c. resist, rearrange
- d. contemplate, ignore

8. It [mindfulness] is a way of \_\_\_\_\_ with all of our experience.

- a. being
- b. celebrating
- c. passively resigning
- d. distorting reality

9. Mindfulness is an \_\_\_\_\_ to this suffering.

- a. quick fix
- b. facilitator
- c. anecdote
- d. catalyst

10. From a mindfulness lens, our \_\_\_\_\_ comes from wanting things to be different than they actually are.

- a. happiness
- b. suffering
- c. wealth
- d. success

11. Mindfulness is nonjudgmental; however, it is discerning and able to \_\_\_\_\_ differentiate between wholesome and unwholesome.

- a. sometimes
- b. occasionally
- c. clearly
- d. incorrectly

12. It [mindfulness] is \_\_\_\_\_ not an ally, a friend, a sanctuary, a refuge.

- a. never
- b. sometimes
- c. occasionally
- d. rarely

13. Although mindful awareness is \_\_\_\_\_ in everyone, it is often covered over by dep conditioning – our parents, teachers, relationships, and society have influenced us in ways known and unknown.

- a. not available

- b. inherent
- c. absent
- d. artificially constructed

14. At the deepest level, mindfulness is about freedom: freedom from \_\_\_\_\_ patterns, freedom from \_\_\_\_\_, and, ultimately, freedom from \_\_\_\_\_.

- a. destructive, obsessiveness, suffering
- b. habitual, controlling behaviors, happiness
- c. inexact, mental illness, tyranny
- d. reflexive, reactivity, suffering

15. Mindful \_\_\_\_\_ is one way individuals can intentionally pursue mindful \_\_\_\_\_.

- a. awareness, practice
- b. practice, thinking
- c. practice, awareness
- d. thinking, emotions

16. Mindfulness can be a \_\_\_\_\_ yet \_\_\_\_\_ practice.

- a. richly complex, simple
- b. maddening, rewarding
- c. fulfilling, disturbing
- d. basic, simple

17. \_\_\_\_\_, \_\_\_\_\_, and attitude are not separate processes or stages – they are interwoven aspects of a single cyclic process and occur simultaneously; the three elements inform and feed back into each other.

- a. commitment, intention
- b. intention, attention
- c. intention, vision
- d. dedication, discipline

17. Intention is simply knowing why we are practicing mindfulness meditation, that is, what is our aspiration and motivation for practice. Intention should also be differentiated from the concept of \_\_\_\_\_ or \_\_\_\_\_ for certain outcomes from meditation practice.

- a. escaping, running from
- b. dreaming, hoping
- c. striving, grasping
- d. dwelling, wishing

18. Intentions are not a concrete \_\_\_\_\_; they are a \_\_\_\_\_.

- a. destination, direction
- b. goal, dream
- c. plan, path
- d. direction, destination

19. Mindfulness involves a \_\_\_\_\_ and \_\_\_\_\_ attention, not simply grazing the surface.
- meaningful, contagious
  - psychedelic, mind altering
  - deep, penetrating
  - superficial, engaged
20. Mindful practice involves a dynamic process of learning how to cultivate attention that is \_\_\_\_\_ and nonreactive, \_\_\_\_\_ and concentrated, so that we can see clearly what is arising in the present moment...
- discerning, sustained
  - confusing, intermittent
  - pleasure seeking, positive
  - hopeful, intermittent
21. Instead of this sustained and penetrating attention, the typical mode of attending for the non-mindful individual is \_\_\_\_\_ and \_\_\_\_\_.
- habitual, deep
  - reflexive, superficial
  - reactive, long lasting
  - hyper-reflexive, conditioned
22. According to J. Kabat-Zinn, mindfulness is understood “not just a bare attention but as an \_\_\_\_\_ attention”.
- affectionate
  - passive
  - accommodating
  - descriptive
23. Often, the quality of mindful awareness is not explicitly addressed. However, the qualities, or \_\_\_\_\_, we bring to the act of paying attention is \_\_\_\_\_.
- intention, important
  - attention, crucial
  - attitude, irrelevant
  - attitude, crucial
24. Attending without bringing the attitudinal qualities into the practice may result in practice that is \_\_\_\_\_ or \_\_\_\_\_ of inner (or outer) experience.
- condemning, judgmental
  - frustrating, maddening
  - irritating, painful
  - too positive, rewarding
25. The field of \_\_\_\_\_ demonstrates that our repeated experiences shape our \_\_\_\_\_. If we continually practice meditation with a cold, judgmental, and impatient attention, these are the pathways that will get \_\_\_\_\_.

- a. psychology, brain, stronger
- b. neuroplasticity, brain, stronger
- c. education, mind, weaker
- d. medicine, mind, exploited

26. By intentionally bringing the attitudes of patience, compassion, and nonstriving to the attentional practice, an individual can relinquish the habitual tendency of continually striving for \_\_\_\_\_ experiences or of pushing \_\_\_\_\_ experiences away.

- a. painful, happy
- b. pleasurable, mindful
- c. pleasant, aversive
- d. life changing, introspective

27. \_\_\_\_\_ practice involve systematic meditation practices geared toward cultivating mindfulness skills such as body scan meditation, sitting meditation, and walking meditation.

- a. formal
- b. haphazard
- c. informal
- d. coincidental

28. \_\_\_\_\_ practice “refers to the application of mindfulness skills in \_\_\_\_\_ life”.

- a. formal, work
- b. formal, everyday
- c. informal, everyday
- d. informal, private

29. The negative consequences of stress on helping professionals include increased \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_; decreased job satisfaction; reduced self-esteem; disrupted personal relationships; and loneliness.

- a. frustration, anxiety, pain
- b. depression, emotional exhaustion, anxiety
- c. back injury, schizophrenia, missed work
- d. bipolar disorder, depression, anxiety

30. Stress may also harm professional effectiveness in that it appears to negatively impact \_\_\_\_\_ and \_\_\_\_\_, impinge on decision-making skills, and reduce providers’ ability to establish strong relationship with patients.

- a. attention, concentration
- b. compassion, alertness
- c. patience, problem-solving
- d. attitude, physical health

31. Research suggests that \_\_\_\_\_ impairment affects a significant proportion of health professionals at some point in their careers. Further, stress can increase the likelihood of \_\_\_\_\_.
- emotional, walking out in the middle of a shift
  - physical, chemical dependency
  - psychological, occupational burnout
  - emotional, suicide
32. Part of the territory of the helping profession is encountering extraordinary amounts of \_\_\_\_\_ and \_\_\_\_\_.
- carelessness, injury
  - ungratefulness, mental illness
  - confusion, anger
  - suffering, stress
33. When we put others' needs before our own, we are strengthening our \_\_\_\_\_ of separateness, widening the gap between self and other.
- delusion
  - aversion
  - intention
  - feelings
34. As healthcare workers, we strengthen our idea that *they* over there are really suffering and need more care and help than *I* do. When we begin to see our deep \_\_\_\_\_, often through the practice of meditation, we can let go of false views of separation.
- dependency
  - loneliness
  - interconnectedness
  - longing
35. Learning to manage stress and enhance self-care should be an essential dimension of \_\_\_\_\_ and \_\_\_\_\_.
- clinical training, professional development
  - education, counseling
  - exercise, nutrition
  - clinical education, performance evaluations
36. Programs designed to teach \_\_\_\_\_ skills to trainees as well as professionals currently in the field may represent an important form of preventative treatment for professionals at risk for later psychological problems.
- therapeutic use of self
  - self-care
  - counseling
  - hypnosis

37. The majority of research has focused on mindfulness as a therapeutic intervention for patients; however, training in mindfulness may be especially relevant for health care professionals and trainees as a means of managing \_\_\_\_\_ and enhancing \_\_\_\_\_ (as well as enhancing empathy and compassion).
- stress, self-care
  - anxiety, physical fitness
  - stress, teamwork
  - depression, self-care
38. Mindfulness practice is intended not to magically take away our stress, but to help us \_\_\_\_\_ and know our experience more intimately and to \_\_\_\_\_ to it in a different way.
- deny, give into
  - understand, relate
  - comprehend, get rid of it
  - embrace, be in tuned
39. As we practice \_\_\_\_\_, we begin to see all the ways our pushing and pulling things to be a certain way in therapy – “my way” – is hurting ourselves and the people we are trying to help.
- nonstriving
  - compassion
  - patience
  - beginner’s mind
40. Mindfulness also explicitly teaches \_\_\_\_\_, giving us permission to be imperfect or, put a better way, “perfectly human”.
- awareness
  - self-compassion
  - self-care
  - acceptance
41. A final reason mindfulness practice may be particularly beneficial for health care professionals is that it is not simply a technique to be used while stressed or during a patient encounter, but it is also a way of being that can be applied during \_\_\_\_\_.
- clinical care conference
  - line waiting at the grocery store
  - time at home with family
  - all of the above
42. [Through mindfulness], we practice being with “\_\_\_\_\_ in the same way that we wish to be with our clients or patients”.
- our families
  - our pets
  - our co-workers
  - ourselves

43. Although academic knowledge and skills form the core of clinical and medical graduate programs, an explicit focus on \_\_\_\_\_ and \_\_\_\_\_ as part of training is also critical.
- self-awareness, self-care
  - empathy, forgiveness
  - compassion, intention
  - patience, confidence
44. Mindfulness is awareness, cultivated by paying attention in a \_\_\_\_\_ and particular way: on purpose, \_\_\_\_\_, and \_\_\_\_\_.
- quiet, in reality, judgmentally
  - intentional, in the morning, in the evening
  - disciplined, without thought, without feeling
  - sustained, in the present moment, non-judgmentally
45. \_\_\_\_\_ is the essence of mindfulness – a cultivating of intimacy with your own life unfolding, as if it really mattered. And it does. More than you think. And more than you can possibly think.
- Quietness
  - Stillness
  - Deep listening
  - Exploration
46. The \_\_\_\_\_ that we bring to the practice of mindfulness will to a large extent determine its long-term value to us.
- prior knowledge
  - attitude
  - strict adherence to practice
  - attention
47. Seven attitudinal factors constitute the major pillars of mindfulness practice as we teach it in MBSR. They are:
- non-judging, patience, skepticism, trust, striving, resistance, letting go
  - non-judging, patience, non-striving, intelligence, a beginner's mind, holding on
  - non-judging, patience, a beginner's mind, trust, non-striving, acceptance, letting go
  - a beginner's mind, trust, acceptance, wholesomeness, discernment, non-striving, patience
48. Each one [attitude] relies on and \_\_\_\_\_ the degree to which you are able to cultivate the others.
- influences
  - undermines
  - dictates
  - predicts

## Question Bank for Week 3 Quiz

1. The practice of mindfulness meditation encompasses focusing attention on the experience of \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_; simply observing them as they arise and pass away.
  - a. thoughts, emotions, body sensations
  - b. feelings, pain, anger
  - c. sadness, happiness, anger
  - d. euphoria, dreams, visions
  
2. Fresco, et al. (2007), found that intentionally paying attention with a nonjudgmental attitude leads to a significant change in perspective, a so-called \_\_\_\_\_ or \_\_\_\_\_.
  - a. adjustment, correction
  - b. decentering, reperiencing
  - c. bird's eye view, frame of reference shift
  - d. paradigm shift, closing of the mind
  
3. In Barinaga (2003), meditators report that the regular practice enables them to focus their attention for an extended period of time, and distractions disturb this focus less frequently during \_\_\_\_\_ mediation practice and in \_\_\_\_\_.
  - a. informal, sleeping
  - b. formal, everyday life
  - c. informal, work related tasks
  - d. formal, insomnia
  
4. Maintaining the focus of attention on a pursued object, while disregarding distractions, is referred to as \_\_\_\_\_, or \_\_\_\_\_ attention, and is one of the three attention networks proposed by Posner and Petersen (1990).
  - a. habit monitoring, executive
  - b. concentration, full
  - c. ADHD, inhibited
  - d. conflict monitoring, executive
  
5. Neuroimaging research has established that the \_\_\_\_\_ enables executive attention by detecting the presence of conflicts emerging from incompatible streams of information processing.
  - a. anterior cingulate cortex
  - b. amygdala
  - c. right hind brain
  - d. cerebellum
  
6. During meditation, when distracting \_\_\_\_\_ events or \_\_\_\_\_ conflict with task goals, ACC activation may contribute to the maintenance of attention by alerting the systems, implementing top-down regulation to resolve this conflict.
  - a. internal, fear reactions

- b. external, fantasies
- c. external, memories
- d. internal, strong emotions

7. In an analysis of brain gray matter, Grant, et al. (2010) found that cortical \_\_\_\_\_ in the dorsal ACC was greater in experienced meditators compared with control subjects.

- a. thickness
- b. thinness
- c. atrophy
- d. wasting

8. Studies indicate the strengthening of attention regulation and accompanying ACC performance through mindfulness practice is especially promising for the treatment of disorders that suffer from deficiencies in these functions; such as \_\_\_\_\_ or \_\_\_\_\_.

- a. schizophrenia, bipolar disorder
- b. depression, anxiety
- c. personality disorder, posttraumatic stress disorder (PTSD)
- d. attention-deficit/hyperactivity disorder (ADHD), bipolar disorder

9. Mind wandering is defined as the conscious processing of information that is \_\_\_\_\_ to immediate sensory input and to the task currently being performed...

- a. critical
- b. unrelated
- c. secondarily related
- d. necessary

10. Studies have routinely documented that state of enduring \_\_\_\_\_ (such as \_\_\_\_\_) are associated with greater mind wandering and inducing unhappy mood leads to short-term increases in the amount of off-topic thought and absent-minded error.

- a. low mood, depression
- b. euphoria, mania
- c. nervousness, anxiety
- d. paranoia, schizophrenia

11. \_\_\_\_\_ also increases mind wandering. As the duration of a task \_\_\_\_\_, both the likelihood of error and the rate of task-unrelated thoughts escalate.

- a. Drunkenness, increases
- b. Barbiturate use, decreases
- c. Fatigue, increases
- d. Hypervigilance, decreases

12. Studies suggest that both \_\_\_\_\_ and \_\_\_\_\_ are strong predictors of fatigue-related clinical error.

- a. night work, schedule instability

- b. 2<sup>nd</sup> shift work, twelve-hour shifts
- c. 1<sup>st</sup> shift work, eight-hour shifts
- d. 3<sup>rd</sup> shift work, eight-hour shifts

13. Laboratory studies have documented that as an individual becomes \_\_\_\_\_ in a particular task, his or her mind is \_\_\_\_\_ likely to engage in task-unrelated thoughts.

- a. proficient, less
- b. practiced, more
- c. an expert, less
- d. practiced, less

14. The combination of \_\_\_\_\_, \_\_\_\_\_, and the often \_\_\_\_\_ nature of medical work provides fertile ground for mind wandering.

- a. exhaustion, coffee induced jitters, challenging
- b. arrogance, fatigue, mundane
- c. low mood, fatigue, routine
- d. anxiety, depression, stressful

15. Because the process of perceptual \_\_\_\_\_ can interfere with even basic attentional processes, it is likely to interfere with the ability to gather information, even for experienced medical practitioners.

- a. interpretation
- b. decoupling
- c. coupling
- d. judgement

16. ...attempts to deliberately control mind wandering can – ironically - \_\_\_\_\_ the rate at which the mind wanders, as was demonstrated by a series of classic studies illustrating that attempts to directly control conscious thought often \_\_\_\_\_.

- a. decrease, work
- b. not change, do not work
- c. effect, succeed
- d. increase, backfire

17. Strategies to reduce \_\_\_\_\_ and \_\_\_\_\_ would therefore be expected to also have an impact on mind wandering.

- a. positive mood, fatigue
- b. negative affect, fatigue
- c. anxiety, depression
- d. negative affect, arrogance

18. A growing body of research indicates that mindfulness training enhances \_\_\_\_\_ in a manner that is consistent with the assumption that it decreases \_\_\_\_\_.

- a. intention, medical errors
- b. attitude, falling asleep at work
- c. attention, mind wandering

d. mood, interpersonal conflicts

19. Meditation training also results in improved \_\_\_\_\_, suggesting a potentially synergistic effect on mind wandering derived from both the attention training and the accompanying positive mood.

- a. overall health
- b. mood
- c. energy
- d. executive attention

20. Findings indicate that the Mindfulness Based Stress Reduction (MBSR) program should be particularly effective in reducing disruptive mind wandering because it develops the skills required to sustain \_\_\_\_\_ while reducing \_\_\_\_\_ and \_\_\_\_\_.

- a. attention, negative mood, burnout
- b. intention, anxiety, burnout
- c. attention, positive mood, career longevity
- d. energy, negative mood, workplace hostility

21. Jon Kabat-Zinn writes, “If we hope to see things more clearly, as they actually are, and thereby perceive their intrinsic wholeness and interconnectedness, we have to be mindful of the ruts our thinking gets us into and the \_\_\_\_\_ we make all the time about \_\_\_\_\_ and \_\_\_\_\_”.

- a. perceptions, our mind, our thoughts
- b. fantasies, things, the world
- c. tacit assumptions, things, people
- d. judgements, ourselves, our grief

22. The problem of the nine dots teaches us that we may have to expand beyond our habitual, highly conditioned ways of \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_ in order to solve, resolve, or even dissolve certain kinds of problems.

- a. listening, accusing, withdrawing
- b. working, playing, resting
- c. seeing, thinking, acting
- d. denying, lying, cheating

23. Seeing with eyes of wholeness means recognizing that nothing occurs in \_\_\_\_\_, that problems need to be seen within the context of whole systems.

- a. isolation
- b. turmoil
- c. groups
- d. reality

24. The very title, “the Buddha”, means, in Pali – the language in which his teachings were first written down – *the one who has* \_\_\_\_\_.

- a. ruled
- b. awakened

- c. prayed
- d. sacrificed

25. In the words of Jon Kabat-Zinn, the Buddha was awakened to what? To the nature of reality and to the potential for freeing oneself from \_\_\_\_\_ by engaging in a \_\_\_\_\_ and very \_\_\_\_\_ approach to living.

- a. addiction, holistic, complicated
- b. work responsibilities, fragmented, productive
- c. suffering, systematic, practical
- d. obligations, haphazard, simple

26. In essence, mindfulness is \_\_\_\_\_ because it is all about attention and awareness, and attention and awareness are human capacities that are innate in all of us.

- a. universal
- b. reserved for Buddhists
- c. cathartic
- d. a religion

27. The challenge of mindfulness is to be \_\_\_\_\_ for your experience \_\_\_\_\_ rather than immediately jumping in to change it or try to force it to be different.

- a. detached, looking in
- b. present, as it is
- c. absent, as in a dream
- d. unconscious, as it might be

28. Whatever the quality of your experience in a particular moment, what is most important is your \_\_\_\_\_ of it.

- a. dislike
- b. appreciation
- c. opinion
- d. awareness

29. In speaking of the discipline of practicing awareness, John Kabat-Zinn states, “Just taking this kind of stance toward our own experience, without trying to fix or change anything at all, is an act of \_\_\_\_\_ toward oneself, an act of \_\_\_\_\_, and an act of \_\_\_\_\_”.

- a. greed, stupidity, hatred
- b. generosity, intelligence, kindness
- c. indifference, apathy, disinterest
- d. selfishness, laziness, boredom

30. \_\_\_\_\_ seems to constitute our “default setting” rather than \_\_\_\_\_.

- a. Thinking, awareness
- b. Awareness, thinking
- c. Remembering, forgetting
- d. Forgetting, remembering

31. ...awareness is at least as important and useful to us as thinking. In fact, it is demonstrably more powerful in that any thought, no matter how profound, can be held in \_\_\_\_\_.

- a. isolation
- b. balance
- c. congruence
- d. awareness

32. With regard to mindfulness, "Paying \_\_\_\_\_ is a \_\_\_\_\_ skill, capable of ongoing refinement".

- a. respect, teachable
- b. attention, trainable
- c. your debt, notable
- d. tribute, customary

33. Jon Kabat-Zinn writes, "For the most part, it was never pointed out by our parents or teachers, and no suggestion was made during our educational trajectory, that maybe \_\_\_\_\_ could provide some kind of balance and perspective so that our thoughts didn't rule our lives, unbeknownst to us".

- a. awareness of thinking
- b. awareness of our own stupidity
- c. denial of our own intelligence
- d. arrogance about our intelligence

34. Each moment is an opportunity to see that we do not have to succumb to old \_\_\_\_\_ that function below the level of our awareness.

- a. people
- b. laws
- c. habits
- d. traumas

35. With ongoing practice, we at least become far more familiar with the mind's comings and goings; over time, in important ways, the mind learns how to \_\_\_\_\_ itself, at least to a degree.

- a. stabilize
- b. educate
- c. turn off
- d. reject

36. Many people are not aware of this, but strictly speaking, the statues we see of the Buddha, as well as other Buddhist art objects, serve as representations of \_\_\_\_\_ rather than of \_\_\_\_\_.

- a. humility, dominance
- b. states of mind, divinity
- c. confusion, godliness
- d. abstract thought, power

37. Mindfulness is often described as the heart of Buddhist mediation. Nevertheless, cultivating mindfulness is not a \_\_\_\_\_ activity.
- Christian
  - Catholic
  - Protestant
  - Buddhist
38. Mindfulness-based stress reduction (MBSR) and the Stress Reduction Clinic were founded at \_\_\_\_\_ in \_\_\_\_\_.
- Johns Hopkins Medical Center, 1998
  - Duke University Medical Center, 2001
  - University of Massachusetts Medical Center, 1979
  - Harvard School of Medicine, 1983
39. When we identify ourselves with a permanent, solid “self”, it is a \_\_\_\_\_ of consciousness, a form of self-imprisonment, according to Einstein.
- state
  - aversion
  - habit
  - delusion
40. According to Dr. Roger Walsh, professor of psychiatry and behavioral sciences at the School of Medicine of the University of California at Irvine, meditation is best described as a \_\_\_\_\_ discipline.
- unconscious
  - consciousness
  - hypothetical
  - antithetical

#### Question Bank for Week 5 Quiz

1. It is amazing that we can be simultaneously completely \_\_\_\_\_ with the appearance of our own body and at the same time completely \_\_\_\_\_ with it as well.
- preoccupied, out of touch
  - obsessed, in touch
  - apathetic, out of touch
  - angered, in touch
2. Much of our preoccupation with how we look comes from a deep-seated \_\_\_\_\_ about our bodies.
- obsession
  - hatred
  - insecurity
  - love affair

3. Sooner or later people get over such preoccupations, but the \_\_\_\_\_ of insecurity can \_\_\_\_\_ about one's body.
- level, continue
  - root, remain
  - presence, discontinue
  - root, go away
4. Sad to say, we may never feel completely comfortable with the way our body is, never completely at home in it. This may give rise to problems with touching and being touched, and therefore with \_\_\_\_\_.
- selecting clothing
  - playing sports
  - intimacy
  - choosing a career
5. Jon Kabat-Zinn writes, "Any deep feelings of this kind that you might have about your body cannot change until the way you actually \_\_\_\_\_ your body changes".
- treat
  - experience
  - feel about
  - trust
6. Our \_\_\_\_\_ about our body can limit drastically the range of \_\_\_\_\_ we allow ourselves to experience.
- feelings, thoughts
  - thoughts, feelings
  - negativity, thoughts
  - positivity, thoughts
7. When we put energy into actually experiencing our body and we refuse to get caught up in the overlay of \_\_\_\_\_ thinking about it, our whole view of it and of ourself can change dramatically.
- tyrannical
  - judgmental
  - haughty
  - arrogant
8. Usually we take our bodies' abilities for granted and do not appreciate what they can do until we are \_\_\_\_\_ or \_\_\_\_\_.
- winning a gold medal, running a marathon
  - old, tired
  - injured, sick
  - young, at the top of our game
9. Jon Kabat-Zinn writes, "When you tune into them [sensations of the body], you are reclaiming \_\_\_\_\_ in that very moment, and your body as well, making

yourself more real and more alive. You are living your life in real \_\_\_\_\_ as it unfolds, moment by moment in awareness”.

- a. your life, time
- b. yourself, seriousness
- c. your identity, drama
- d. social security, time

10. The body scan meditation involves \_\_\_\_\_.

- a. getting a CT scan
- b. getting an MRI
- c. getting scanned for weapons at the airport
- d. moving your mind systematically through the parts of your body

11. The body scan is an effective method for developing both \_\_\_\_\_ and \_\_\_\_\_ of attention simultaneously.

- a. concentration, flexibility
- b. muscle strength, flexibility
- c. balance, endurance
- d. fine motor coordination, focus

12. In our awareness, every moment and every experience we have is \_\_\_\_\_, even the more trying and difficult ones, so there is no need to try to \_\_\_\_\_ anything at all.

- a. unique, forget
- b. frustrating, relax
- c. special, attain
- d. wasted, become

13. The idea in scanning your body is to actually \_\_\_\_\_ and \_\_\_\_\_ each region you focus on and linger in it in the timeless present as best you can.

- a. feel, inhabit
- b. ignore, analyze
- c. evaluate, criticize
- d. name, rename

14. In the body scan, it helps if you can feel or imagine that the tension in your body and the feelings of fatigue associated with it are flowing \_\_\_\_\_ on each outbreath and that, on each inbreath, you are breathing in \_\_\_\_\_ and \_\_\_\_\_ and openness.

- a. out, sweat, toxins
- b. in, vitality, energy
- c. out, vitality, energy
- d. in, sweat, toxins

15. The challenge, of course, is to bring your \_\_\_\_\_ to it [body scan], to let each time be as if you were encountering your body for the \_\_\_\_\_ time. When you

practice the body scan regularly for a while, you come to notice that your body isn't quite the same every time you do it. You become aware that your body is \_\_\_\_\_ constantly.

- a. beginner's mind, first, changing
- b. patients, second, hurting
- c. non-judgement, third, thinking
- d. trust, fourth, tingling

16. From the perspectives of Buddhism and neuroscience, the \_\_\_\_\_ is included as a \_\_\_\_\_ sense.

- a. heart, separate
- b. mind, sixth
- c. body, separate
- d. mind, first

17. In awareness, \_\_\_\_\_ and \_\_\_\_\_ can become our teacher of the moment, reminding us of the possibility of being fully present: the gentle caress of air on our skin, the play of light, the look on someone's face, a passing contraction in the body, a fleeting thought in the mind.

- a. sounds, people
- b. anything, everything
- c. feelings, thoughts
- d. all of the above

18. \_\_\_\_\_ is the sense of knowing and feeling the body's position in space both statically and in motion.

- a. kinesthesia
- b. proprioception
- c. sensation
- d. telepathy

19. \_\_\_\_\_ is the sense of knowing how your body is feeling from the inside. It is an \_\_\_\_\_ feeling, a \_\_\_\_\_ sense.

- a. interoception, embodied, felt
- b. kinesthesia, unusual, lived
- c. proprioception, embodied, felt
- d. interoception, ignored, controlled

20. By considering awareness as a verb, *awarenessing*, it conveys a tonal feeling that is important in the cultivation of mindfulness. Awareness is no longer merely a thing, or a desirable state to be attained and therefore \_\_\_\_\_. It becomes a verb and thus carries a whole dynamic suggesting a \_\_\_\_\_ rather than an end state.....

- a. fluid, fixed interval
- b. static, process
- c. static, fixed
- d. fluid, process

21. Body awareness can be understood as the ability to notice \_\_\_\_\_ body sensations.
- subtle
  - exaggerated
  - painful
  - electrifying
22. Carmody and Baer (2008) found large increases in \_\_\_\_\_, as indicated on the Five Facet Mindfulness Questionnaire, in subjects who had participated in a mindfulness-based stress reduction program (MBSR).
- spatial awareness
  - body awareness
  - visual awareness
  - auditory awareness
23. Enhanced sensory processing in the insula and the secondary somatosensory areas of the brain, has been suggested to represent increased \_\_\_\_\_ processing of the stimulus, that is, awareness of the actual sensation of the stimulus as \_\_\_\_\_.
- top down, it seems
  - top down, it is
  - bottom up, it seems
  - bottom up, it is
24. It has been suggested that the \_\_\_\_\_ is a crucial structure for mediating the first-person perspective of bodily states (Blanke et al., 2005), or \_\_\_\_\_.
- insula, felt sense
  - thalamus, embodiment
  - temporo-parietal junction, embodiment
  - temporo-parietal junction, kinesthesia
25. Body sensations have been ascribed a crucial role in the conscious experience of \_\_\_\_\_, not only historically (James, 1884), but also currently (Bechara & Naqvi, 2004; Damasio, 1990, 2003).
- emotions
  - thoughts
  - pain
  - sound
26. An increased awareness of the body's response to an emotional stimulus might thus lead to greater awareness of one's own \_\_\_\_\_ life; in turn, an awareness of one's emotion is a precondition for being able to \_\_\_\_\_ these emotions.
- cognitive, deregulate
  - emotional, deregulate
  - emotional, regulate
  - cognitive, regulate

27. A lack of awareness of internal experience – along with problems in emotion regulation – is a crucial problem for individuals with \_\_\_\_\_, and helping patients increase their internal awareness might be one key element in its treatment (Lineham et al., 1991).

- a. anxiety
- b. depression
- c. schizophrenia
- d. borderline personality disorder

28. An increase in body awareness is also relevant in the treatment of \_\_\_\_\_ (Hill, Craighead, & Safer, 2011) as well as \_\_\_\_\_ disorders.

- a. post-traumatic stress disorder, anxiety
- b. eating disorders, substance abuse
- c. bipolar disorder, substance abuse
- d. obsessive compulsive disorder, bipolar

29. Internal awareness of one's own experience has also been suggested to be an important pre-condition for \_\_\_\_\_ responses. Accurate observations of the self are required for the appropriate understanding of \_\_\_\_\_ (Decety & Jackson, 2004).

- a. empathetic, others
- b. pity, self
- c. life-saving, others
- d. self-pity, others

30. Neuroscientific research shows that a subset of brain regions (namely, the insula and temporo-parietal junction) is impacted both in awareness of one's own \_\_\_\_\_ and in \_\_\_\_\_ and empathetic responses (Singer, et al., 2004).

- a. thoughts, memory
- b. thoughts, social cognition
- c. body sensations, mental capacity
- d. body sensations, social cognition

31. Before the scientific revolution, knowing was more emotional, more internal, more connected to the natural world (Bordo, 1987). The senses were valued over the mind as a source of truth (Berman, 1989). A person "knew" something by being deeply and intimately connected to it, a knowing that was \_\_\_\_\_ and \_\_\_\_\_.

- a. somatic, emotional
- b. kinesthetic, literal
- c. proprioceptive, literal
- d. embodied, literal

32. Descartes introduced a way of looking at knower and the known as separate, thus delegitimized a mode of knowing (Bordo, 1987). The consequence of this split is that the primary way of knowing the world in the modern era has been \_\_\_\_\_.

- a. embodied

- b. cognitive
- c. somatosensory
- d. emotional

33. In recent years we have seen renewed legitimization of the body. This is evidenced through the Women's Movement. In consciousness-raising groups, issues related to the regulation of their bodies and their sexuality have been addressed by women as part of their \_\_\_\_\_ on their \_\_\_\_\_,

- a. cognitive discourse, freedom
- b. emotional healing, abuse
- c. reflection, oppression
- d. statement, rights

34. It is precisely this willingness to give voice to what our culture tells us to shroud in silence that creates \_\_\_\_\_, "bringing the body into the plain light of shared human experience (Mairs, 1990, p. 92).

- a. freedom
- b. resentment
- c. distaste
- d. pride

35. With greater freedom to speak honestly about the body comes growing awareness of how the body is a \_\_\_\_\_ of knowledge.

- a. confused puzzle
- b. rare source
- c. source
- d. conundrum

36. Polanyi (1969), in his work on tacit knowing, argues that knowledge actually \_\_\_\_\_ in the body.

- a. ends
- b. begins
- c. culminates
- d. gets lost

37. Rather than learning taking place after an experience, Michelson argues that the body needs to be understood as the \_\_\_\_\_ of learning.

- a. catalyst
- b. roadblock
- c. site
- d. nemesis

38. Rossiter (1999) thinks of the self as "an unfolding story" in that "as we understand the world and our experiences narratively, so also do we understand and construct the \_\_\_\_\_ as narrative (p. 62). While there needs to be fundamental continuity of

this self over time, we also must account for \_\_\_\_\_ in the self. All of this implies that our personal narrative is \_\_\_\_\_ and \_\_\_\_\_, never fixed.

- a. change, fluid, dynamic
- b. lies, constancy, fluid, dynamic
- c. life plan, balance, waxing, waning
- d. world, contradiction, internal, external

### Question Bank for Week 7 Quiz

1. Emotion regulation refers to the \_\_\_\_\_ of ongoing emotional responses through the action of regulatory processes.

- a. consistency
- b. alteration
- c. management
- d. breakdown

2. A growing body of literature suggests that mindfulness practice results in improvements in \_\_\_\_\_ regulation.

- a. emotion
- b. body
- c. time
- d. swallow

3. Studies showing self-report data from healthy individuals have shown that mindfulness meditation \_\_\_\_\_ negative mood states, \_\_\_\_\_ positive mood states, and \_\_\_\_\_ distractive and ruminative thoughts and behaviors.

- a. increased, increased, increased
- b. increased, decreased, increased
- c. decreased, increased, decreased
- d. decreased, decreased, decreased

4. Physiological studies also support the proposition that meditation training leads to decreased emotional \_\_\_\_\_ and facilitates a return to emotional \_\_\_\_\_ after reactivity.

- a. reactivity, baseline
- b. response, turmoil
- c. response, stability
- d. reactivity, hyperarousal

5. During emotion regulation, prefrontal control systems modulate emotion-generative systems, such as the \_\_\_\_\_, which is responsible for the detection of \_\_\_\_\_ arousing stimuli.

- a. pre-frontal cortex, somatosensory
- b. anterior cingulate, somatosensory
- c. thalamus, affectively

d. amygdala, affectively

6. A typical pattern detected when individuals deliberately regulate affective responses is increased activation within the \_\_\_\_\_ and decreased activation in the \_\_\_\_\_, suggesting that the \_\_\_\_\_ projections to the \_\_\_\_\_ exert an inhibitory top-down influence.

- a. pre-frontal cortex (PFC), amygdala, PFC, amygdala
- b. thalamus, amygdala, PFC, thalamus
- c. amygdala, insula, PFC, insula
- d. insula, PFC, amygdala, PFC

7. Disorders characterized by a deficit in emotion regulation are frequently associated with dysfunction in the frontal-limbic network, that is, reduced prefrontal activation and exaggerated amygdala activation. These disorders include: (choose all that apply)

- a. social phobia
- b. addiction (same)
- c. obsessive-compulsive disorder (same)
- d. post-traumatic stress disorder (same)
- e. all of the above

8. Improved emotion regulation underlies the beneficial effects of mindfulness practice on \_\_\_\_\_ reduction and on reductions of \_\_\_\_\_ symptoms.

- a. weight, manic
- b. stress, depressive
- c. weight, anxiety
- d. job loss, depressive

9. The cognitive change strategy, \_\_\_\_\_, refers to reinterpreting the meaning of a stimulus to change one's emotional response to it.

- a. extinction
- b. assessment
- c. reappraisal
- d. conflict resolution

10. The cognitive change strategy, \_\_\_\_\_, refers to stimulus-response reversal.

- a. extinction
- b. assessment
- c. reappraisal
- d. conflict resolution

11. Whereas typical contemporary descriptions regard attentional control in emotion regulation as adaptive when attention is directed \_\_\_\_\_ from emotional distressing material, mindfulness usually involves bringing attention \_\_\_\_\_ the stimulus. Keeping attention on an emotional reaction leads to a situation of exposure with a subsequent \_\_\_\_\_ process.

- a. quickly, against, reappraisal

- b. away, to, extinction
- c. away, to, reappraisal
- d. away, shutting down, cognitive retraining

12. Garland et al. (2011) described mindful emotion regulation as “positive reappraisal”, or the adaptive process through which \_\_\_\_\_ events are reconstructed as \_\_\_\_\_, meaningful, or benign.

- a. stressful, beneficial
- b. positive, negative
- c. confusing, harmful
- d. tragic, happy

13. Another theory on the role of mindfulness in emotion regulation, is that \_\_\_\_\_ meditators may have automated an accepting stance toward their experience, so they no longer require cognitive control efforts such as reappraisal.

- a. novice
- b. experienced
- c. inconsistent
- d. praying

14. Parallels have been drawn between the mindfulness practice of turning toward unpleasant emotions, and \_\_\_\_\_, through which patients acquire a sense of safety in the presence of the formerly feared stimuli.

- a. hypnosis
- b. exposure therapy
- c. cognitive processing therapy
- d. psychotropic drug therapy

15. Mindfulness meditation includes refraining from engaging in \_\_\_\_\_ or other \_\_\_\_\_ by using enhanced attention regulation skills, thereby maximizing the exposure to the experienced emotion.

- a. repression, safety behaviors
- b. reappraisal, safety behaviors
- c. cognitive avoidance, safety behaviors
- d. emotion regulation, avoidance behaviors

16. Meditation is often associated with high levels of relaxation in the form of increased \_\_\_\_\_ tone and decreased \_\_\_\_\_ activity.

- a. parasympathetic, sympathetic
- b. sympathetic, parasympathetic
- c. stress, brain
- d. muscle, emotional

17. The inhibition of the amygdala serves to suppress \_\_\_\_\_, thereby allowing control over behavioral reactions to emotions. Deficits in fear extinction are thought to be related to a number of psychiatric disorders including PTSD, schizophrenia, and depression. Research

findings suggest that mindfulness meditation could directly influence one's capacity to extinguish \_\_\_\_\_ fear by enhancing the structural and functional integrity of the brain network involved in safety signaling.

- a. anger, conditioned
- b. fear (Hölzel, p. 546), conditioned
- c. melancholy, trauma based
- d. euphoria, trauma based

18. The hippocampus and the amygdala were the two key parts of the primitive “nose brain” that, in evolution, gave rise to the cortex and then to the neocortex. Today, these limbic structures do much or most of the brain's learning and remembering; the amygdala is the specialist for \_\_\_\_\_ matters.

- a. cognitive
- b. sensory
- c. motor
- d. emotional

19. The amygdala's extensive web of neural connections allows it, during an emotional emergency, to capture and drive much of the rest of the brain – including the \_\_\_\_\_.

- a. rational mind
- b. sensory cortex
- c. motor cortex
- d. hypothalamus

20. LeDoux discovered a smaller bundle of neurons that leads directly from the thalamus to the amygdala, in addition to those going through the larger path of neurons to the cortex. This discovery means that the amygdala can have us spring to action while the \_\_\_\_\_ - but more fully informed – neocortex unfolds its more refined plan for reaction. LeDoux believes that this short bypass directly to the amygdala, allows the amygdala to be a repository for emotional impressions and memories that we have never known about in full \_\_\_\_\_.

- a. faster, attention
- b. quicker, embodiment
- c. much slower, sensation
- d. slightly slower, awareness

21. While the hippocampus remembers the dry facts, the amygdala retains the emotional flavor that goes with those facts. For example, “The \_\_\_\_\_ is crucial in recognizing a face as that of your cousin. But it is the \_\_\_\_\_ that adds you don't really like her”.

- a. amygdala, hippocampus
- b. hippocampus, amygdala
- c. thalamus, amygdala
- d. hippocampus, thalamus

22. In effect, the brain has two memory systems, one for ordinary facts and one for emotional charged ones. This may make sense for maintaining safety during evolution, but \_\_\_\_\_ memories can be faulty guides to the present.
- detailed
  - emotional
  - forgotten
  - delusional
23. The amygdala's method of comparison is \_\_\_\_\_: when one key element of a present situation is similar to the past, it can call it a "match" – which is why this circuit is \_\_\_\_\_: it acts before there is full \_\_\_\_\_.
- analytical, precise, disclosure
  - apple to apple, accurate, denial
  - associative, sloppy, confirmation
  - dissociative, detached, commitment
24. LeDoux believes that since early emotional memories are established at a time before infants have words for their experience, when these emotional memories are triggered in later life, there is no \_\_\_\_\_ set of articulated thoughts about the response that takes us over.
- opposite
  - different
  - mature
  - matching
25. The neocortical area or pre-frontal cortex of the brain, brings a more analytic or \_\_\_\_\_ response to our emotional impulses, modulating the amygdala and other limbic areas.
- appropriate
  - inappropriate
  - sloppy
  - rapid
26. Ordinarily the complementarity of limbic system and neocortex, amygdala and prefrontal lobes, means each is a full partner in mental life. When these partners interact well, \_\_\_\_\_ rises – as does intellectual ability. This paradigm urges us to harmonize \_\_\_\_\_ and \_\_\_\_\_.
- temperature, brain, body
  - emotional intelligence, head, heart
  - intelligence, body, mind
  - temper, emotion and thinking
27. It has now been shown conclusively that the extent to which an animal is given options to respond \_\_\_\_\_ to a particular stressor strongly influences how much \_\_\_\_\_ dysregulation and breakdown will occur as a result of exposure to that stressor.

- a. affectively, physiological
- b. effectively, physiological
- c. cognitively, physiological
- d. cognitively, psychological

28. Sense of control, a \_\_\_\_\_ factor, is a key factor in protecting an animal from stress-induced disease.

- a. physiological
- b. mental
- c. emotional
- d. psychological

29. Even if there is no actual course of external action we can take that will have a meaningful effect under certain extremely stressful circumstance, human beings still have profound \_\_\_\_\_ psychological resources that can give us a sense of being engaged and in control to some degree and thereby protect us from helplessness and despair.

- a. internal
- b. external
- c. innate
- d. manufactured

30. Dr. Richard Lazarus' work on defining psychological stress as a relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being, emphasized the critical role of \_\_\_\_\_ and \_\_\_\_\_ choice. Dr. Lazarus's work implied that the \_\_\_\_\_ we bring to the transaction, the way we see it and hold it in awareness, our perspective as a whole, can determine whether a situation is labeled as \_\_\_\_\_ or not.

- a. extinction, unconscious, definition, defining
- b. extinction, conscious, attention, life changing
- c. appraisal, conscious, meaning, stressful
- d. appraisal, unconscious, opinion, stressful

31. According to Jon Kabat-Zinn, there are many ways of living that contribute to building up your "bank account" of \_\_\_\_\_ resources in advance, so that you are better prepared to handle intensely stressful experiences when they inevitable arise.

- a. psychological
- b. emotional
- c. inner
- d. monetary

32. Our resources are the combination of \_\_\_\_\_ and \_\_\_\_\_ supports and strengths that help us to cope with an ever-changing field of experiences.

- a. up, down
- b. inner, outer
- c. psychological, physiological
- d. pharmaceutical, psychological

33. Loving and supportive family relationships, friendships, and membership in groups that you care about are examples of \_\_\_\_\_ resources that could help buffer your experiences of stress.
- external
  - internal
  - medicinal
  - earthly
34. Your degree of confidence in your ability to handle adversity and challenges of all kinds (self-efficacy); your view of yourself as a person; your views on change and on what might be possible; your religious beliefs; your level of self-efficacy in terms of specific rather than general challenges; as well as your levels of stress hardiness, sense of coherence, and affiliative trust; are examples of \_\_\_\_\_ resources.
- external
  - medicinal
  - earthly
  - inner
35. Jon Kabat -Zinn writes: if we can learn to see change as an integral part of life and not as a threat to our well-being, we will be in a much better position to cope effectively with it. The meditation practice itself brings us \_\_\_\_\_ with the undeniable experience of continual change within our own minds and bodies, as we watch our constantly changing thoughts, feelings, sensations, perceptions, and impulses, as well as continual change of everything and everybody around us.
- in denial
  - help
  - face-to-face
  - in opposition
36. \_\_\_\_\_ refers to maintaining tight ranges of variability on physiological systems that promote immediate survival, whereas, \_\_\_\_\_ refers to the health maintenance of physiological systems within much wider operating ranges.
- allostasis, homeostasis
  - homeostasis, allostasis
  - wellness, illness
  - mindfulness, mindlessness
37. Self-destructive behaviors such as overworking, overeating, and substance use are examples of \_\_\_\_\_ coping in response to stress. They are termed this because although they may provide some relief in the short run, they can \_\_\_\_\_ stress in the long run.
- adaptive, compound
  - productive, lessen
  - maladaptive, compound
  - uncontrollable, lessen

38. Stressors that come and go over relatively short periods of time, such as completing your income taxes or having an argument with your spouse are considered \_\_\_\_\_ stressors; whereas stressors that last over a longer period of time such as a serious illness or being the caregiver for a family member with a persistent condition, are considered \_\_\_\_\_ stressors.

- a. chronic, acute
- b. acute, chronic
- c. negative, short term
- d. long term, negative

39. Acute stressors can add up to create situations that bring on chronic stress. One way that an acute stressor can become chronic is through \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.

- a. psychotic thoughts, happiness, anger
- b. delusional thoughts, worry, anger
- c. intrusive thoughts, worry, rumination
- d. delusional thoughts, rumination, anger

40. In the fight or flight response, it hardly matters whether the stimulus is a \_\_\_\_\_ or a much more \_\_\_\_\_ to our social well-being and sense of self. The resulting outcomes are very similar: an overall state of physiological and psychological \_\_\_\_\_.

- a. physical threat, abstract threat, hyperarousal
- b. psychological threat, emotional threat, depression
- c. internal, external, anxiety
- d. positive stressor, negative stressor, tension

41. The overall function of the sympathetic branch of the autonomic nervous system is to \_\_\_\_\_ things up, whereas the function of the parasympathetic branch is to act as a \_\_\_\_\_.

- a. amp, facilitator
- b. speed, brake
- c. mess, detangler
- d. stir, administrator

42. The vagus (meaning \_\_\_\_\_ in Latin) nerve plays an essential role in how we deal with stress. When stressed, most people show a \_\_\_\_\_ in vagal tone. Having a \_\_\_\_\_ vagal tone is associated with greater calm and resilience, as well as recovering from stress more rapidly, greater social engagement, and positive emotions.

- a. lost, increase, higher
- b. displaced, increase, lower
- c. wandering, decrease, higher
- d. hyper, increase, lower

43. Bringing awareness to your \_\_\_\_\_ and allowing it to slow down on its own, particularly the outbreaths, \_\_\_\_\_ vagal tone.

- a. breathing, increases
- b. body, decreases
- c. thoughts, increases
- d. feelings, decreases

44. Despite the fact that we rarely encounter truly life-threatening situations in our daily lives, our minds often respond to typical stressful events that are potentially manageable in countless other ways, as serious threats. When our fight-or-flight pathways become chronically activated, they change our \_\_\_\_\_ as well as our \_\_\_\_\_.

- a. mood, thoughts
- b. life expectancy, friendships
- c. biology, psychology
- d. perception of ourselves, perception of others

45. There is mounting evidence that chronic stimulation of the sympathetic nervous system can lead to long-term physiological dysregulation such as high blood pressure, chronic pain, and sleep disorders, as well as psychological distress in the form of anxiety and depression. This level of impact is referred to as \_\_\_\_\_.

- a. homeostatic underload
- b. a psychogenic fugue
- c. hyperarousal
- d. allostatic overload

46. One very prevalent maladaptive coping strategy is to \_\_\_\_\_ that there is a problem at all. However, it is important to recognize that denial is not \_\_\_\_\_ maladaptive. It can be an effective temporary strategy for coping with relatively unimportant problems until you cannot deny them any longer and must pay attention, or a necessary coping strategy to maintain safety in some extreme cases of physical or psychological abuse.

- a. pretend, usually
- b. deny, always
- c. scream out, typically
- d. make up, always

#### Question Bank for Week 10 Quiz

1. The essence of Buddhist psychology lies in the teaching that there is no such thing as a \_\_\_\_\_, unchanging self. Rather, the \_\_\_\_\_ of a self is a product of an \_\_\_\_\_ mental process.

- a. permanent, perception, ongoing
- b. semi-permanent, reality, constant
- c. fixed, definition, static
- d. fluid, perception, ongoing

2. \_\_\_\_\_ is not entangled in the contents of awareness and facilitates a detachment from identification with the \_\_\_\_\_ sense of self.

- a. Awareness, fluid
  - b. Meta-awareness, static
  - c. Identity, true
  - d. Judgement, perceived
3. In place of the identification with the static self, there emerges a tendency to identify with the phenomenon of “\_\_\_\_\_” self.
- a. ridiculing
  - b. judging
  - c. freeing from
  - d. experiencing
4. From a Buddhist perspective, identification with the static sense of self is the cause of \_\_\_\_\_ stress, and disidentification results in less afflictive experience and the freedom to experience a more \_\_\_\_\_ way of being.
- a. physical, fake
  - b. internal, true
  - c. psychological, genuine
  - d. work, relatable
5. Understanding that our sense of “I” is not as solid, permanent, or substantial as we habitually hold it to be ultimately uproots \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_. Understanding this burns up the fuel that runs our repetitive habits.
- a. clinging, attachment, hostility
  - b. talking, crying, hitting
  - c. detachment, frustration, anxiety
  - d. anxiety, depression, stressful relationships
6. In mindfulness practice, all experiences are observed as they arise and pass. By closely observing the contents of consciousness, practitioners come to understand that these are in constant change and thus are \_\_\_\_\_.
- a. misleading
  - b. transient
  - c. trustworthy
  - d. peaceful
7. The process of nonjudgmental observation fostering a detachment from identification with the contents of consciousness, is termed \_\_\_\_\_ or \_\_\_\_\_.
- a. positive flow, felt sense
  - b. interpreting, neglecting
  - c. re-perceiving, decentering
  - d. diminishing, reducing
8. The benefits of mindfulness meditation to self-concept can be summarized as a more positive \_\_\_\_\_, more \_\_\_\_\_, and higher \_\_\_\_\_ of oneself.
- a. self-representation, self-esteem, acceptance

- b. opinion of self, friends, opinion
- c. attitude, work ethic, belief
- d. affect, energy, acceptance

9. Some studies indicate that more experienced meditators show self-concept styles that are typically associated with less \_\_\_\_\_.

- a. social support
- b. physical injury
- c. pathological symptoms
- d. trust in self

10. Structures in the brain believed to be responsible for self-referential processing, such as the medial prefrontal cortex, the posterior cingulate cortex, and the inferior parietal lobule, are characterized as a group as the \_\_\_\_\_.

- a. default mode network
- b. executive functioning network
- c. memory network
- d. emotional network

11. Functional neuroimaging reveal that mindfulness meditation may \_\_\_\_\_ activity in the default mode network, indicating diminished involvement in the \_\_\_\_\_ mode of self-reference.

- a. increase, practiced
- b. decrease, habitual
- c. not effect, default mode network
- d. facilitate, static

12. Increased brain activity in regions supporting body and internal awareness, suggest that increased \_\_\_\_\_ may be closely related to changes in the perspective of the \_\_\_\_\_.

- a. self-awareness, body
- b. attention, world
- c. body awareness, self
- d. memory, self

13. Greater \_\_\_\_\_ awareness might replace the previous, \_\_\_\_\_ form of self-reference.

- a. body, default
- b. internal, narrative
- c. self, believed
- d. body, justified

14. Hölzel, et al. (2011b) believe that attention regulation, body awareness, emotion regulation, and change in perspective on self, are highly \_\_\_\_\_; so much so that a \_\_\_\_\_ between each component might seem artificial.

- a. opposed to one another, distinction

- b. inflated, connection
- c. interrelated, distinction
- d. imagined, relationship

15. As the components of mindfulness mutually facilitate each other, the occurring process could be understood as an \_\_\_\_\_ process.

- a. upward spiral
- b. downward spiral
- c. centrifugal
- d. inference

16. Psychologist, Kristin Neff, suggests that self-compassion entails three components. Which of the following is not one of those components?

- a. self-kindness
- b. common humanity
- c. forgiveness
- d. mindfulness

17. The cultivation of self-compassion has been suggested to explain much of the \_\_\_\_\_ of mindfulness-based interventions.

- a. ineffectiveness
- b. effect
- c. negative outcome
- d. success

18. The generation of feelings of kindness toward oneself in instances of perceived inadequacy or suffering is an act of \_\_\_\_\_.

- a. love
- b. emotion regulation
- c. hostility
- d. weakness

19. Compassion involves sensitivity to the experience of \_\_\_\_\_, coupled with a deep desire to \_\_\_\_\_ that suffering (Goetz, et al., 2010)

- a. life, alleviate
- b. suffering, alleviate
- c. pain, worsen
- d. suffering, be realistic about

20. Neff writes, that in order for us to experience compassion, we must first acknowledge the presence of pain; which involves pausing, stepping out of our usual frame of reference, and viewing the world from the vantage point of \_\_\_\_\_.

- a. another
- b. reality
- c. faith
- d. the bible

21. Compassion literally means, \_\_\_\_\_. Self-compassion is simply \_\_\_\_\_ directed \_\_\_\_\_, relating to ourselves as the object of care and concern when faced with the experience of suffering.
- pitying another person, love, outward
  - to suffer with, compassion, inward
  - to give someone all your money, love, inward
  - comforting someone, compassion, inward
22. \_\_\_\_\_ means engaging in inner dialogs that are gentle and encouraging rather than harsh and belittling, acknowledging we are doing the best we can, and soothing and nurturing ourselves in times of failure and shortcomings.
- Mindfulness
  - Common humanity
  - Self-kindness
  - Self-compassion
23. The component of self-compassion that recognizes that we all suffer and fosters the view of a connected mindset that is inclusive of others, is \_\_\_\_\_.
- common humanity
  - self-kindness
  - self-compassion
  - mindfulness
24. Self-compassion entails mindful awareness of our negative thoughts and emotions so that they are approached with \_\_\_\_\_ and \_\_\_\_\_.
- fear, anxiety
  - pity, forgiveness
  - balance, equanimity
  - love, forgiveness
25. Neff believes that self-compassion is best understood as a \_\_\_\_\_ experience composed of \_\_\_\_\_ parts.
- dual, interacting
  - single, interacting
  - multi-faceted, several
  - individual, two
26. Historically, self-compassion has been studied using measures of \_\_\_\_\_ that determine the association between trait self-compassion and psychological health.
- correlation
  - comparison
  - observation
  - mood induction
27. Increasingly, researchers are using other methods such as \_\_\_\_\_, to examine the impact of self-compassion on well-being.

- a. behavioral observations
- b. short-term interventions
- c. both a and b
- d. neither a or b

28. An ever-increasing body of research suggests that self-compassion enables people to \_\_\_\_\_ less while also helping them to \_\_\_\_\_.

- a. suffer, thrive
- b. spend, pay their bills
- c. argue, be autonomous
- d. be sick, have health benefits

29. One of the most consistent findings in the literature is that \_\_\_\_\_ self-compassion is linked to \_\_\_\_\_ anxiety and depression.

- a. decreased, less
- b. greater, less
- c. genuine, more
- d. false, more

30. Even when controlling for self-criticism, a study found self-compassionate people to be \_\_\_\_\_ likely to experience anxiety than those with low levels of self-compassion.

- a. more
- b. the same
- c. less
- d. ten times more

31. Reduced use of first person singular pronouns such as “I” and using more first person plural pronouns such as “we”, when writing about weakness, suggests that self-compassion may reduce self-evaluative anxiety because weaknesses feel less threatening when considered in the light of the \_\_\_\_\_ human experience.

- a. individual
- b. shared
- c. horrible
- d. organic

32. Self-compassionate people have also been found to \_\_\_\_\_ much less than those who lack self-compassion. This most likely can be contributed to their mindful attitude of \_\_\_\_\_, which allows them to break the cycle of negativity.

- a. obsess, patience
- b. worry, beginner’s mind
- c. ruminate, acceptance
- d. ruminate, letting go

33. Self-compassion is \_\_\_\_\_ from self-pity, which is a “woe is me” attitude in which people become immersed in their own problems and forget that others have similar problems.

- a. distinct
- b. the same
- c. similar
- d. opposite

34. Studies suggest that self-compassion deactivates the \_\_\_\_\_ system (associated with feelings of insecure attachment, defensiveness, and \_\_\_\_\_), and activates the \_\_\_\_\_ system (associated with feelings of secure attachment, safety, and the \_\_\_\_\_ system).

- a. sympathetic, depression, sensory, digestive
- b. parasympathetic, autonomic arousal, sensory, oxytocin-opiate
- c. threat, autonomic arousal, self-soothing, oxytocin-opiate
- d. parasympathetic, depression, self-soothing, digestive

35. McEwan, et al. (2008) found that giving individuals a brief self-compassion exercise lowered their levels of the stress hormone \_\_\_\_\_ and increased \_\_\_\_\_, which is associated with a greater ability to self-soothe when stressed.

- a. norepinephrine, emotional intelligence
- b. adrenaline, patience
- c. oxytocin, breath rate
- d. cortisol, heart-rate variability

36. Self-compassionate individuals are less likely to suppress unwanted \_\_\_\_\_ than those who lack self-compassion, and more likely to acknowledge that their emotions are \_\_\_\_\_.

- a. thoughts and emotions, valid and important
- b. anger, more important than another's
- c. friendships, unimportant
- d. invitations, unstable

37. \_\_\_\_\_ is associated with positive psychological strengths, such as emotional intelligence, wisdom, life satisfaction, and feelings of social connectedness.

- a. self-concept
- b. self-esteem
- c. self-compassion
- d. self-reliance

38. \_\_\_\_\_ refers to the degree to which we evaluate ourselves positively. It represents how much we like or value ourselves and is often based on \_\_\_\_\_ with others.

- a. self-concept, comparisons
- b. self-esteem, comparisons
- c. self-compassion, differences
- d. self-reliance, similarities

39. Self-esteem also tends to be contingent on \_\_\_\_\_ in valued life domains.

- a. success
- b. friendships
- c. independence
- d. satisfaction

40. In contrast to self-esteem, self-compassion is not based on positive judgments or evaluations – it is a way of \_\_\_\_\_ to ourselves.

- a. downgrading
- b. pretending
- c. positively relating
- d. lying

41. People feel self-compassion because they are human beings, not because they are special or above average, so that \_\_\_\_\_ rather than \_\_\_\_\_ is emphasized.

- a. separation, togetherness
- b. interconnection, separateness
- c. hostility, love
- d. competition, support

42. Studies that asked subjects to consider hypothetical scenarios involving failure or embarrassment, suggest that self-compassion enable people to \_\_\_\_\_ that there are negative as well as positive aspects of their personality.

- a. reject
- b. pretend
- c. refuse to accept
- d. admit and accept

43. Researchers in the Netherlands found self-compassion to be a stronger predictor of \_\_\_\_\_ than self-esteem.

- a. narcissism
- b. healthy functioning
- c. heart disease
- d. mania

44. Neff & Vonk (2009) found a robust association between self-esteem and \_\_\_\_\_, and no association between self-compassion and this personality trait.

- a. narcissism
- b. obsessive-compulsive disorder
- c. borderline personality disorder
- d. anti-social personality disorder

45. Research has shown self-compassion to be linked to personal initiative, perceived self-efficacy, and \_\_\_\_\_. Neely, et al. (2009) found that self-compassionate people have less \_\_\_\_\_, but when they do fail, they are more likely to \_\_\_\_\_.

- a. depression, creative ideas, give up

- b. entrepreneurship, innate abilities, try again
- c. apathy, need to compete, try again
- d. intrinsic motivation, fear of failure, try again

46. In different studies, self-compassion has been seen as an effective way to cope with difficult emotional experiences, including:

- a. divorce
- b. early childhood trauma
- c. chronic physical pain
- d. all the above

47. Neff and Beretvas (2012) found that self-compassionate individuals were described by their partners as being \_\_\_\_\_ emotionally connected, accepting, and autonomy-supporting; while being \_\_\_\_\_ detached, controlling, and verbally or physically aggressive than those lacking self-compassion.

- a. more, less
- b. slightly more, more
- c. less, less
- d. less, more

48. Gilbert argues that self-compassion is an evolved capacity that emerges from behavioral systems involving \_\_\_\_\_ and \_\_\_\_\_.

- a. neglect, abuse
- b. attachment, affiliation
- c. anger, jealousy
- d. intelligence, superiority

49. Studies indicate that self-compassion is a \_\_\_\_\_ skill that is \_\_\_\_\_. The more you practice it, the more you learn it.

- a. magical, unteachable
- b. innate, unteachable
- c. teachable, dose dependent
- d. teachable, static

50. In the Buddhist tradition, \_\_\_\_\_ and \_\_\_\_\_ are considered to be two wings of a bird, and both are \_\_\_\_\_ to fly.

- a. mindfulness, compassion, necessary
- b. self-esteem, self-compassion, necessary
- c. self-efficacy, compassion, unnecessary
- d. mindfulness, self-esteem, necessary

## Question Bank for Week 12 Quiz

1. \_\_\_\_\_ is the physical process of receiving the message and is \_\_\_\_\_, unlike listening.
  - a. Speaking, cognitive
  - b. Hearing, automatic
  - c. Hearing, intentional
  - d. Speaking, automatic
  
2. \_\_\_\_\_ listening occurs when we react automatically and \_\_\_\_\_, without mental investment, to messages.
  - a. Mindful, routinely
  - b. Mindless, routinely
  - c. Sincere, with interest
  - d. Reflective, routinely
  
3. \_\_\_\_\_ listening occurs when careful and thoughtful \_\_\_\_\_ is paid to messages received.
  - a. Reflective, hearing
  - b. Reflective, intention
  - c. Mindful, attention
  - d. Mindless, attention
  
4. A term used to describe the degree of congruence between what a listener understands and what the message sender was attempting to communicate, is \_\_\_\_\_.
  - a. heart-felt listening
  - b. mismatch listening
  - c. congruent listening
  - d. listening fidelity
  
5. According to research, building and maintaining relationships occurs through \_\_\_\_\_.
  - a. effective listening
  - b. sacrificial love
  - c. self-less listening
  - d. one-way conversations
  
6. Adler, et al. (n.d.) lists several barriers to listening. The list includes:
  - a. information overload and personal concerns
  - b. unresolved anger and personal illness
  - c. rapid thought and noise
  - d. both a and c
  
7. According to Adler, et al. (n.d.), people can never completely understand each other.
  - a. True
  - b. False

8. Match the following poor listening habits with their definition:

1. \_\_\_\_\_ an imitation of actual listening
2. \_\_\_\_\_ taking innocent comments as personal attacks
3. \_\_\_\_\_ failure to hear or acknowledge something in a message
4. \_\_\_\_\_ interested only in expressing own ideas
5. \_\_\_\_\_ responding only to the parts of a message found interesting
6. \_\_\_\_\_ listening to gather information to use later against the speaker

- a. defensive listening
- b. ambushing listening
- c. pseudo listening
- d. stage hogging
- e. insulated listening
- f. selective listening

9. Understanding is composed of several elements: \_\_\_\_\_ of the rules of language, \_\_\_\_\_ of the source of the message, and \_\_\_\_\_ ability.

- a. awareness, knowledge, mental
- b. mastery, knowledge, hearing
- c. awareness, understanding, visual
- d. mastery, understanding, listening

10. \_\_\_\_\_ is the ability to recall information.

- a. Paraphrasing
- b. Remembering
- c. Listening
- d. Filling in the gaps

11. \_\_\_\_\_ is the final step in the listening process and involves offering \_\_\_\_\_ to the speaker.

- a. Responding, feedback
- b. Attending, criticism
- c. Hearing, guidance
- d. Understanding, support

12. Empathizing is a response style used to show that the listener is \_\_\_\_\_ with the speaker.

- a. identifying
- b. agreeing
- c. disagreeing
- d. joining ranks

13. Supporting responses reveal the listener's \_\_\_\_\_ with the speaker and reflect the listener's \_\_\_\_\_ about the speaker.

- a. friendship, opinion
- b. relationship, disdain

- c. solidarity, feelings
- d. authority role, judgment

14. According to Adler, et al. (n.d.), \_\_\_\_\_ is the most common reaction to another's problem and may be \_\_\_\_\_ or \_\_\_\_\_.

- a. advising, helpful, harmful
- b. shock, helpful, harmful
- c. judgment, helpful, harmful
- d. pity, helpful, harmful

15. \_\_\_\_\_ questions are disguised attempts to send a message rather than receive one.

- a. Personal
- b. Probing
- c. Counterfeit
- d. Sincere

16. According to studies cited by Omilion-Hodges and Swords (2016), \_\_\_\_\_ physician communication improves patient decision making, increases patient satisfaction and self-management, increases patient psychological functioning, and tempers physician burnout.

- a. inappropriate
- b. adept
- c. condescending
- d. limited

17. Communication ability is especially crucial in palliative care due to the \_\_\_\_\_ of caring for seriously ill patients and because of its reliance on interdisciplinary \_\_\_\_\_.

- a. depression, isolation
- b. joy, disharmony
- c. emotional work, teamwork
- d. sadness, decision making

18. Mindful communication unites the idea of mindfulness – a state characterized by keen situational awareness – with \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_ communication.

- a. reflective, genuine, adaptive
- b. sincere, flexible, rigid
- c. genuine, adaptive, cold
- d. flexible, maladaptive, genuine

19. Communicating mindfully is an active process where sensemaking is \_\_\_\_\_ and participants remain attentive to the \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_ of the exchange.

- a. inferred, person, place, and time

- b. continuous, timing, nature, context
- c. intermittent, subject, verbs, adverbs
- d. fixed, goals, process, outcome

20. Clinicians practicing mindful communication have the ability to observe patients' \_\_\_\_\_ while observing \_\_\_\_\_ reactions.

- a. family members, visceral
- b. temperature, sympathetic nervous system
- c. reactions, their own personal
- d. emotional state, physical

21. Mindfulness is most often expressed through the thoughtful and intentional use of \_\_\_\_\_ and \_\_\_\_\_ communication.

- a. sincere, apathetic
- b. caring, sweet
- c. verbal, nonverbal
- d. tearful, gift giving

22. Omilion-Hodges and Swords summarize that the practice of mindfulness and, more specifically, mindful communication can \_\_\_\_\_ clinician well-being, \_\_\_\_\_ depersonalization, promote sound decision making, and improve patient \_\_\_\_\_ and care.

- a. increase, decrease, safety
- b. decrease, increase, safety
- c. increase, decrease, happiness
- d. increase, decrease, outcomes

23. Omilion-Hodges and Swords (2016) found four key practices of mindful communication in palliative care. Which of the following is not one of the four?

- a. Consider your audience
- b. Ask question, Listen, Repeat
- c. Discard scripts
- d. Establish your authority

24. When trying to detect a patient's emotional state, it may be helpful for the health professional to pose a question to \_\_\_\_\_ such as "What would I need?"

- a. the closest family member
- b. himself
- c. the patient
- d. the charge nurse

25. In Omilion-Hodges and Swords' (2016) palliative care findings, 19 participants acknowledged that initial meetings with patients and their families should not commence with a \_\_\_\_\_ or even inquiries about palliative care goals, but rather innocuous questions that build connections and help the physician to understand the patient personally.

- a. joke
- b. assessment of vital signs
- c. discussion about diet
- d. medical history

26. Over half of the participants in Omilion-Hodges and Swords' (2016) palliative care study, acknowledge that clinicians should never underestimate the power of utilizing a simple \_\_\_\_\_: "Do you enjoy humor?", "What can I do to communicate most effectively with you?"

- a. joke
- b. sarcastic remark
- c. act of compassion
- d. direct request

27. While a script may help a clinician to feel more at ease, he or she should remember that in that \_\_\_\_\_, the audience comes first and expects and deserves \_\_\_\_\_.

- a. hospital, pity
- b. moment, authenticity
- c. ICU, the highest level of care
- d. situation, pain medication

28. Several participants in Omilion-Hodges and Swords' (2016) study, acknowledged feeling "\_\_\_\_\_" when they were able to honestly express or display their own emotions, such as genuine disappointment and sadness when a patient exhausts treatment plans or when patients incur other difficulties.

- a. at a loss for words
- b. unimaginable sadness
- c. extreme awkwardness
- d. whole

29. All of the following terms, except 1, were used repeatedly by the participants in Omilion-Hodges and Swords (2016) in describing the relationship of the palliative care physician, to the patient and the patient's family. Choose the one term not used in this context.

- a. ally
- b. teammate
- c. friend
- d. enemy

30. What is a routine day for a clinician is likely to be one that family members of a patient do not \_\_\_\_\_.

- a. forget
- b. remember
- c. enjoy
- d. recall

31. One physician, Lynn, in the Omilion-Hodges and Swords (2016) study, shared a perspective to remain mindful at work. She suggested that as clinicians complete their professional tasks, they never forget that they are simultaneously a \_\_\_\_\_ in a patient's story and the patient's family's life.
- small piece
  - nemesis
  - main character
  - teacher
32. Several physicians in the Omilion-Hodges and Swords (2016) study revealed that they follow a routine before beginning a shift that helped to put them in the right mind set. These tools include:
- beginning or ending each shift with meditation to insure intention, presence, and engagement
  - posting cards with words or wearing a pin to remind them of their purpose and responsibility
  - journaling or blogging after each shift as a means of reflecting
  - all of the above
33. Omilion-Hodges and Swords' (2016) findings suggest that the use of mindful communication is not only fundamental in the delivery of patient care, but also in \_\_\_\_\_ well-being.
- family
  - provider
  - hospital
  - patient
34. When comparing a communication course for college students with a communication course incorporating mindfulness, Huston, et al. (2011), suggests that mindfulness training may be unique in its integration of nonreactivity and emotional awareness skills into positive \_\_\_\_\_ strategies.
- reappraisal
  - decision making
  - problem solving
  - coping
35. Huston, et al.'s (2011) findings suggests that mindfulness promotes an adaptive tradeoff between \_\_\_\_\_, promoting positive reappraisal while reducing the tendency to engage in \_\_\_\_\_ others.
- emotional strategies, blaming
  - coping strategies, blaming
  - cognitive strategies, blaming
  - emotional strategies, forgiving

## Appendix H

## Rubric for Final Paper

<b>Criteria</b>	<b>Superior</b>	<b>Sufficient</b>	<b>Minimal</b>	<b>Insufficient</b>
<b>Depth of Reflection</b>	Response demonstrates an in-depth reflection on, and personalization of, the theories, concepts, and/or strategies presented in the course materials to date. Viewpoints and interpretations are insightful and well supported with clear connections between texts and experience. Detailed examples and/or quotes are provided, as applicable. (36-40 points)	Response demonstrates a general reflection on, and personalization of, the theories, concepts, and/or strategies presented in the course materials to date. Viewpoints and interpretations are supported with connections between texts and experience. Appropriate examples and/or quotes are provided, as applicable. (32-35.99 points)	Response demonstrates a minimal reflection on, and personalization of, the theories, concepts, and/or strategies presented in the course materials to date. Viewpoints and interpretations are unsupported or supported with flawed connections between texts and experience. Examples and/or quotes are irrelevant. (28-31.99 points)	Response demonstrates a lack of reflection on, and personalization of, the theories, concepts, and/or strategies presented in the course materials to date. Viewpoints and interpretations are missing, inappropriate or unsupported. Examples and/or quotes when applicable, are not provided. (0-27.99 points)
<b>Required Components</b>	Response includes all components and meets or exceeds all requirements indicated in the instructions. Each question or part of the assignment is addressed thoroughly. (27-30 points)	Response includes all components and meets all requirements indicated in the instructions. Each question or part of the assignment is addressed. (24-26.99 points)	Response is missing some components and/or does not fully meet all the requirements indicated in the instructions. Some questions or parts of the assignment are not addressed. (21-23.99 points)	Response excludes essential components and/or does not address the requirements indicated in the instructions. Many parts of the assignment are addressed minimally, inadequately, or not at all. (0-20.99 points)
<b>Language Use</b>	Writing is clear, concise, and well organized with excellent sentence/paragraph construction. Thoughts are expressed in a coherent and logical manner. Sophisticated language is used that is precise and engaging, with a notable sense of voice and awareness of audience and purpose. (13.5-15 points)	Writing is mostly clear, concise, and well organized with good sentence/paragraph construction. Thoughts are expressed in a coherent and logical manner. Language is fluent and original, with evidence of a sense of voice and awareness of audience and purpose. (12-13.499 points)	Writing is unclear and loosely organized with fair sentence/paragraph construction. Thoughts are not expressed in a consistently logical manner. Language is appropriate, but basic, with an inconsistent sense of voice and/or awareness of audience and purpose. (10.5-11.99 points)	Writing is unclear and disorganized, with poor sentence/paragraph construction. Thoughts ramble and make little sense. Language is vague or imprecise for the audience or purpose and lacks a sense of voice. (0-10.499 points)
<b>Format and Conventions</b>	Response demonstrates full adherence to the required format, and good control of the conventions with essentially no errors, even with sophisticated language. (13.5-15 points)	Response demonstrates nearly full adherence to the required format, and general control of the conventions. Errors present only when using sophisticated language. (12-13.499 points)	Response demonstrates partial or fair adherence to the required format, and partial control of the conventions. Errors are present, but do not hinder comprehension. (10.5-11.99 points)	Response demonstrates poor or lack of adherence to the required format, and little to no control of the conventions. Errors are rampant, making comprehension very difficult. (0-10.499 points)

Developed and adapted from:

National Council of Teachers of English. (2006). *Reflective writing rubric*. Retrieved from [http://www.readwritethink.org/files/resources/lesson\\_images/lesson963/Rubric.pdf](http://www.readwritethink.org/files/resources/lesson_images/lesson963/Rubric.pdf)

University of Rhode Island. (n.d). *Reflection evaluation criteria (the rubric)*. Retrieved from: [web.uri.edu/assessment/files/reflection\\_rubric.doc](http://web.uri.edu/assessment/files/reflection_rubric.doc)

## Appendix I

## CCHS Academic Change Form

**CABARRUS COLLEGE OF HEALTH SCIENCES  
ACADEMIC CHANGE FORM**

This form is to be considered a summary document. Attach appropriate documents detailing the proposed change.

IHS 350 Mindfulness for Self-Care  
Current Course Prefix, Number & Title

OTA Program  
Current Program Title

**Proposed Action** (Check As Many As Apply)

Minor Changes:	Intermediate Changes:
<p><b>Approvals:</b> Program Chair, Provost and Curriculum Committee. <i>(Notifications to the Academic Affairs Council &amp; Dean, Student Affairs &amp; Enrollment Management*</i></p> <p><input type="checkbox"/> Course Title or Course Description Change (minor stylistic or editorial change)</p> <p><input type="checkbox"/> Significant Course Student Learning Outcome Additions, Revisions, or Deletions of Content</p> <p><input type="checkbox"/> Course Prefix Change</p> <p><input type="checkbox"/> Course Number Change</p> <p><input type="checkbox"/> Course Delivery Mode Change</p> <p><input type="checkbox"/> Cross Listing Two or More Courses</p> <p><input type="checkbox"/> Course Reactivation (republishing a course in the Catalog)</p> <p><input type="checkbox"/> Significant Change to Program Goals/Outcomes</p>	<p><b>Approvals:</b> Program Chair, Provost, Curriculum Committee, and Provost's Council. <i>(Notifications to the Academic Affairs Council &amp; Dean, Student Affairs &amp; Enrollment Management*</i></p> <p><input type="checkbox"/> Prerequisite or Co-requisite Change</p> <p><input type="checkbox"/> Course Credit Hour Change</p> <p><input type="checkbox"/> Alteration to the Substance of an Existing Course</p> <p><input checked="" type="checkbox"/> New Course Addition</p> <p><input type="checkbox"/> Course Level Change</p> <p><input type="checkbox"/> Course Inactivation (removing the course from Catalog)</p> <p><input type="checkbox"/> Course Deletion</p> <p><input type="checkbox"/> Program Admission Requirement Change</p>
Curricular Substantive Changes:	
<p><b>Approvals:</b> Program Chair, Provost, Curriculum Committee, Provost's Council, and Dean, Student Affairs &amp; Enrollment Management. <i>Notifications to Academic Affairs Council, President's Leadership Council, and Southern Association of Colleges and Schools*</i></p> <p><input type="checkbox"/> Offering 25-49% of a Program via Distance Education</p> <p><input type="checkbox"/> Offering 50% or more of a Program via Distance Education</p> <p><input type="checkbox"/> Offering 25-49% of a Program's Credit Hours at an Off-Campus Site</p> <p><input type="checkbox"/> Offering more than 50% of a Program's Credit Hours at an Off-Campus Site</p>	<p><b>Approvals:</b> Program Chair, Provost, Curriculum Committee, Academic Affairs Council, President's Leadership Council, Governing Board, Southern Association of Colleges and Schools, and other applicable accrediting agencies.*</p> <p><input type="checkbox"/> Significant Alteration to the Mission and/or Coursework of a Program</p> <p><input type="checkbox"/> Significant Alteration to the Length of a Program in Credit Hours or Time to Completion</p> <p><input type="checkbox"/> Institutional Level Change</p> <p><input type="checkbox"/> Program Title Change</p> <p><input type="checkbox"/> New Certificate, Diploma, or Degree Program</p> <p><input type="checkbox"/> Initiation of Courses or Programs at a New Site</p> <p><input type="checkbox"/> Initiation of Programs or Courses through Contractual Agreement or Consortium</p>
Institutional Substantive Changes	
<p><b>Approvals:</b> Academic Affairs Council, Chancellor's Council, Governing Board, and Southern Association of Colleges and Schools.*</p>	

- Significant Alteration to the Mission of the College  
 Initiation of a Branch Campus  
 Initiation of a Merger or Consolidation  
 Relocation of the College Campus  
 Change in the Governance, Ownership, Control,  
 or Legal Status of the College  
 Closure of the College

***Date proposal is to become effective:***

***Semester: Spring 2018***

\*Program Chairs are responsible for notifying program-specific accrediting agencies when applicable.

**RECOMMENDATIONS:** The prevalence of burnout among healthcare providers is well documented. The hallmark symptoms of this stress syndrome: emotional exhaustion, depersonalization, and a decreased sense of personal accomplishment, can greatly impact a clinician's physical health, mood, therapeutic relationships with patients, ability to express compassion and empathy, quality of job performance, and longevity in the profession. Research indicates that healthcare providers most susceptible to burnout are those who do not practice good self-care. Interestingly, professionals from multiple disciplines identify self-care as the most effective tool for preventing compassion fatigue and related stress syndromes. The idea of self-care may seem elementary and natural; but in truth, it requires intentionality. An intentional approach to self-care that is rapidly gaining recognition, is mindfulness. Clinicians participating in a weekly mindfulness course that encourages awareness, presence, non-judgement, non-reactivity, and self-compassion are experiencing reduced tendencies and symptoms of burnout. A growing body of research is finding similar positive outcomes in students training to become tomorrow's healthcare providers. Mindfulness for Self-Care offers students the opportunity to become aware and attentive to this important aspect of their personal lives, a capacity that will translate into resiliency in the face of stress associated with clinical education and their future roles as licensed practitioners. The first offering of this course will be part of a Master's Thesis research project at North Carolina State University. The appropriate level of approval for the protection of human subjects, will be secured from NCSU's Institutional Review Board.

**APPROVAL PROCEDURE:** Action upon a request takes place in the following sequence. The form is to be signed by the appropriate persons in turn.

ProgramChair/Coordinator: _____	Date: _____
Provost: _____	Date: _____
CurriculumCommittee: _____	Date: _____
Provost's Council: _____	Date: _____
Dean, Student Affairs & Enrollment Management: _____	Date: _____
Academic Affairs Council: _____	Date: _____
President's Leadership Council: _____	Date: _____
Governing Board: _____	Date: _____
Southern Association of Colleges and Schools: _____	Date: _____

Minor and Intermediate Changes: After final approval, the Provost's Assistant will distribute copies to: Program Chair, Registrar, Catalog Editor, and Provost.

Curricular Substantive Changes: After final approval, the Provost's Assistant will distribute copies to: Program Chair; Registrar; Dean, Student Affairs & Enrollment Management; and Catalog Editor.

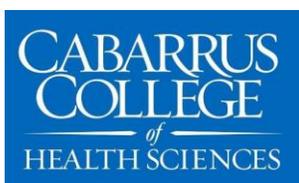
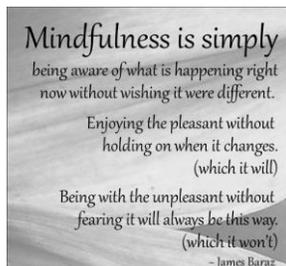
Institutional Substantive Changes: After final approval, the Provost's Assistant will distribute copies to: President's Leadership Council, Governing Board, and Southern Association of Colleges and Schools.

REFERENCE: Policy 02-02 Academic and Substantive Change Process  
5/12/17

revised

## Appendix J

## Recruitment Flyer



**For information on how to sign up for  
this class and study, please contact  
Nancy Green at 704-403-3559 or  
[nancy.green@cabarruscollege.edu](mailto:nancy.green@cabarruscollege.edu).**

### Do Something Good for Yourself Join Us Spring Semester 2018

#### IHS 350 – Mindfulness for Self-Care (\*3 credit hours)

**Instructor:** Katrina Larrison, OTR/L, RYT-200

**Format:** Hybrid (weekly class meets on campus Wednesdays 12:00-1:30 pm)

**Course Description:** Mindfulness for Self-Care is designed to introduce healthcare students to the art and science of mindfulness, and its role in reducing clinician burnout, through enhanced self-care. Texts provide students the foundational understanding upon which to build a personal practice while supplemental scholarly work from the fields of medicine, nursing, education, psychology, and allied health provide a reference point through which students can make meaning of their mindful experiences. Weekly formal and informal practice offers students a consistent and safe place to develop an awareness of their own bodies, thoughts, and feelings that can translate into embodied knowledge, enhanced self-regulation, effective communication, improved self-care, and overall well-being. Experiential assignments, journaling, and a group experience encourage students to reflect while discovering the many ways mindfulness permeates, positively influences, and reduces suffering in their lives and the lives of others. (Computer Fee \$25.00. Student Fee \$60.00. Cost is \$395.00 per credit hour.)



### Contribute to the Body of Knowledge Be a Part of a Research Study

**Study Title:** "Improving Self-Care Through Mindfulness: An Introductory Course for Healthcare Students"

**Principle Investigator:** Katrina Larrison, OTR/L, RYT-200

**Study Description:** Students registered for IHS 350 this Spring will be invited to participate in a study interested in how an introductory mindfulness course influences student self-care and use of mindfulness in daily life. Completed written course assignments and a self-assessment will provide the data for the study. No additional surveys, interviews, or time will be requested of students. Participation in the study is voluntary, is not required for taking the class, and is independent of all grading. Data will be collected and examined only by the principle investigator and her faculty advisor, Dr. Chad Hoggan. When reporting the results of the study, the principle investigator will ensure that all student participants have full anonymity. This study will serve as part of a Master's Thesis, required by The College of Education at North Carolina State University.

## Appendix K

## NCSU IRB Exempt Status Approval

**Hoggan - 12455 - IRB Protocol assigned Exempt status**

---

**IRB Administrative Office** <pins\_notifications@ncsu.edu>  
Reply-To: debra\_paxton@ncsu.edu  
To: kharris@ncsu.edu

Fri, Oct 20, 2017 at 2:36 PM

Dear Katrina Larrison:

Date: October 20, 2017

IRB Protocol 12455 has been assigned Exempt status

Title: How a Mindfulness Course Influences Self-Care and Daily Life in Healthcare Students

PI: Hoggan, Chad David

The research proposal named above has received administrative review and has been approved as exempt from the policy as outlined in the Code of Federal Regulations (Exemption: 46.101. Exempt b.1). Provided that the only participation of the subjects is as described in the proposal narrative, this project is exempt from further review. This approval does not expire, but any changes must be approved by the IRB prior to implementation.

1. This committee complies with requirements found in Title 45 part 46 of The Code of Federal Regulations. For NCSU projects, the Assurance Number is: FWA00003429.
2. Any changes to the protocol and supporting documents must be submitted and approved by the IRB prior to implementation.
3. If any unanticipated problems or adverse events occur, they must be reported to the IRB office within 5 business days by completing and submitting the unanticipated problem form on the IRB website: <http://research.ncsu.edu/sparcs/compliance/irb/submission-guidance/>.
4. Any unapproved departure from your approved IRB protocol results in non-compliance. Please find information regarding non-compliance here: [http://research.ncsu.edu/sparcs-docs/irb/non-compliance\\_faq\\_sheet.pdf](http://research.ncsu.edu/sparcs-docs/irb/non-compliance_faq_sheet.pdf).

Please let us know if you have any questions.

Sincerely,

Deb Paxton  
[919.515.4514](tel:919.515.4514)  
IRB Administrator  
[dapaxton@ncsu.edu](mailto:dapaxton@ncsu.edu)  
NC State IRB Office  
Jennie Ofstein  
[919.515.8754](tel:919.515.8754)  
IRB Coordinator  
[irb-coordinator@ncsu.edu](mailto:irb-coordinator@ncsu.edu)  
NC State IRB Office

## Appendix L

## Demographic Survey

“How a Mindfulness Course Influences Self-Care and Daily Life in Healthcare Students”

Student Demographics

Spring 2018 Semester

Student name \_\_\_\_\_

Student age \_\_\_\_\_

CCHS Degree program \_\_\_\_\_

Year in program \_\_\_\_\_

Prior education/degrees earned beyond high school

\_\_\_\_\_  
Prior knowledge or experience with mindfulness (circle one):

I have little to no familiarity with it

I have read and heard about it

I have participated in a mindfulness course

I have a daily mindfulness practice