Course Title: **Mindfulness and Mental Health**
Course Instructors: Seema Desai, MD, Drew Bianchi, MD, Mari Kurahashi, MD, MPH
Department: Child and Adolescent Mental Health Studies (CAMS), NYU Child Study Center

Course Description: Have you ever accidentally locked yourself out of your apartment? Walked to school or work realizing you have no recollection of what happened along the way? Been introduced to someone and moments later can’t recall their name? Where is our mind during moments like these, and how can bringing more awareness to ourselves lead to improvements in well being? Are children by nature more in tune with their bodies and feelings than adults? Can being in the present moment with our children enhance their development? Can paying closer attention to our thoughts change our brains? These are questions that will be explored in this course as we embark upon an exploration of mindfulness. We will define mindfulness, develop an understanding of its complex mechanisms, reveal the neuroscience behind mindfulness-based practices, and learn its practical applications across the developmental lifespan from infancy into adulthood.

**Learning Objectives:**

A. **Knowledge**
   Students will be able to:
   a. Define Mindfulness
   b. Describe 7 features inherent to all mindfulness practice
   c. Understand proposed theories on the mechanisms of mindfulness practice
   d. Understand what special considerations there are in using mindfulness with children and how mindfulness can be used in pediatric mental health, including what research has been conducted within this population
   e. Discuss 5 evidence-based clinical interventions that utilize principles of mindfulness practice
   f. Explain the stress response versus the relaxation response and how these are induced
   g. Discuss current evidence for neurobiological correlates of mindfulness practice
   h. Define The Four Immeasurables and describe how they can be cultivated
   i. Recognize and discuss barriers to effective mindfulness practice

A. **Skills**
   Students will be able to:
   a. Lead class discussion on assigned topics related to mindfulness
   b. Conduct a multidisciplinary literature search on a topic related to the scientific study of mindfulness
   c. Write a review paper on the neuroscientific evidence of mindfulness
   d. Present ideas effectively on the topics of mindfulness and The Four Immeasurables (the cultivation of kindness, compassion, empathetic joy and equanimity)

**Introduction and Background of Meditation: Week 1**

Students will learn the background and history of mindfulness and its roots in Buddhist Meditation and Eastern Culture. Students will also learn the history of mindfulness practice within western psychological disciplines.

**Week 1**
Topic: Introduction and background on meditation and Mindfulness practice
Readings

**Introduction to Mindfulness: Weeks 2-4**

What is mindfulness? How does it work? What are qualities cultivated in mindfulness practice? How is it experienced? In Sessions 2-4 the focus will shift to definition, characteristics and forms of mindfulness practice. Students will study theory of formal versus informal mindfulness practice and consider and interpret “awareness” in the context of mindfulness practice.

**Week 2**

**Topic:** Mindfulness: What is it?

**Readings:**

**Week 3**

**Topic:** Mindfulness: Formal Versus Informal Practice

**Readings:**

**Week 4**

**Topic:** Mindfulness Practice and Awareness

**Readings:**

**Week 4 Assignment: Research Paper Proposal Due**

**The Science of Mindfulness: Weeks 5-8**

Emerging research suggests that regular mindfulness practice can lead to changes in the brain and immune system, improve mental health functioning, ease pain, and cause changes in physiological response to stress. Weeks 5-8 will feature an exploration of the science of mindfulness, including psychological mechanisms and physiological, immunological and neurobiological correlates as uncovered by the most recent science available.

**Week 5**

**Topic:** Mechanisms of Mindfulness I Attention Regulation

**Readings:**
**Week 6**
Topic: Mechanisms of Mindfulness II Body Awareness
Readings:

**Week 7**
Topic: Mechanisms of Mindfulness III Emotion Regulation
Readings:

**Week 7 Assignment: Annotated Bibliography due**

**Week 7 Midterm Exam**

**Week 8**
Topic: Mechanisms of Mindfulness IV: Change in Concept of Self
Readings:

**Evidence Based Mindfulness Medicine: Weeks 9-10**

How can mindfulness be applied to clinical practice? How are studies designed? What research tools are implemented in studies? How is mindfulness measured? What are the arguments against mindfulness? Sessions 9 & 10 will answer these questions. Students will learn how mindfulness practice can be a functional tool across the developmental lifespan to facilitate child and adult development.

**Weeks 9-10**
Topic: Current Evidence for Mindfulness as a Mental Health Tool
Readings:

**Week 10 Assignment: Research Paper Due**

**Mindfulness with Children and Adolescents: Week 11**

How can mindfulness be used by children and adolescents? Students will learn what special considerations there are in teaching mindfulness to the pediatric population and what mindfulness play in pediatric mental health. Students will also be learn what evidence there is to support the use of mindfulness in this young population, as well as the limitations of the research.

**Week 11**

Readings:
1. Siegel, D. *The Whole-Brain Child: 12 Revolutionary Strategies to Nurture Your Child's Developing Mind*

**The Four Immeasurables: Week 12-13**

How can positive emotions and attitudes complement mindfulness practice? Can one cultivate positivity? Weeks 12 – 14 introduce students to the “four immeasurables,” also known as the Bramaviharas: Loving-kindness, compassion, empathetic joy, and equanimity. We will examine how cultivating these emotions can lead to a greater sense of peace and ease in well being. We will also learn subtleties of how these have been used in contemplative and clinical practice tools for transformation.

**Weeks 12-14**

Topic: Four Immeasurables: Lovingkindness, Compassion, Empathetic Joy and Equanimity

Readings:
4. Salzberg, S. *Lovingkindness: The Revolutionary Art of Happiness*,

**Week 14 Final Exam**
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<td>13</td>
<td>4 Immeasurables: Empathetic Joy and Equanimity</td>
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<td>14</td>
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<td>Final Written Exam</td>
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**How students will be graded:**

**Class participation 10%**
Students will be expected to read articles and participate in class discussion in general (5%). Groups of students will also be assigned specific readings throughout the semester 1-2 classes. When assigned readings, they will be expected to lead discussion and present ideas effectively about the assigned readings to the group.

**Research Paper Proposal 10%**
Students will submit a 2-3 page paper outlining their proposed topic for the research paper by week 4 (February 18) of the course. Potential paper topics include defining what mindfulness is, description of the different types of mindfulness practice, neurobiological correlates of mindfulness, effect of mindfulness on immune function, or mechanisms of mindfulness. Students may consult with teachers to choose an appropriate topic for research paper.

**Annotated Bibliography 10%**
Students are expected to submit an annotated bibliography, which lists and describes references that will be used in their research paper. The annotated bibliography is due by week 7 (March 11) of the course and should include at least 7 references.

**Research Paper 20%**
Students will be required to write one 7 – 9 page research paper related to material assigned in course. The paper is due by week 10 (April 15) of the course and should be based on their previously submitted proposal and annotated bibliography.

**Midterm and Final written exams 50% (25% each)**

The Midterm exam will be administered at week 7 (March 11) and the final exam on the last day of class (May 6). Both exams are open-ended essay style, evaluating students’ fund of knowledge and comprehension of concepts discussed in the course.