

2022 First-Year Engineering Experience (FYEE) Workshop

Fully Engaged: Integrating mindfulness and meditation in engineering classes.

Michigan State University, East Lansing, Michigan

ABSTRACT

The purpose of this workshop is to actively involve participants in the practice of mindfulness and meditation while learning its principles and how to integrate them in a variety of ways into engineering classes.

The workshop will look at the art and science of mindfulness and meditation interspersed with activities used to teach and practice. The format will be hands-on including participation in exercises as well as discussions and sharing of practices from a variety of perspectives.

The content comes from various texts on mindfulness such as *Fully Present: The Science, Art, and Practice of Mindfulness*, by Susan L. Smalley. The activities listed in the schedule include guided practice sessions and discussions that illustrate and elucidate the content and use of meditation and mindfulness in engineering classes. Presenting and practicing a variety of ways allows participants to customize for their comfort and knowledge to grow and add on where they see the best fit.

LEARNING GOALS:

- Discuss, analyze, and practice the fundamental tenets of mindfulness.
- Discuss the art and science of mindfulness practice.
- Integrate the fundamentals of mindfulness practice with meditation practice.
- Practice mindfulness and meditation techniques to evaluate the impact and effectiveness for student and personal goals.
- Evaluate mindfulness practices for use in classrooms.
- Compare different techniques and approaches for class time and use.

WORKSHOP SCHEDULE:

- Open with basic meditation used in mindfulness in the form of a breathing exercise.
- Assess audience familiarity of the topic and build consensus on definitions of mindfulness and meditation. Participants share practices, previous experiences, and best approaches.
- Building on the experience and knowledge base, discuss the science and art, why it works and where it has impact, bringing forward any experiences shared and the leaders' experiences.
- Practice further exercises in listening that have direct impact on student teaming.
- Practice and discuss other mindfulness techniques that expand application for different situations.
- Practice guided reflection exercise with selected readings on mindfulness.
- Summarize in small groups to present takeaways and ideas for classroom and personal application.

PRESENTERS/FACILITATORS

Dr. Richard Whalen, Teaching Professor and Director, First Year Engineering at Northeastern University. Over 20 years' experience teaching first year students and experience implementing mindfulness and mediation in the engineering classroom.

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Dr. Kathryn Schulte Grahame, Teaching Professor and Associate Director, First Year Engineering at Northeastern University. Over 10 years' experience teaching first year students and experience implementing mindfulness and mediation in the engineering classroom.

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