

# TEAK/TA Teaching Workshop



## Session 1: Introduction and Classroom Management

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# Introductions...

- Take 1 minute to write down:
  - Write down your name
  - A topic you'd like to practice teaching
  - A list of things you know about teaching and a list of things you'd like to learn about teaching
- Meet the class...in groups
  - Name, year, why are you here, etc.
  - Teaching topic

# Instructors (syllabus)

- Dr. Elizabeth DeBartolo
- Dr. Risa Robinson
- Other guest lectures as appropriate

# Session Activities...

- Introduction to TEAK and this teaching workshop, basic classroom management
- Objectives:
  - Be aware of the objectives of TEAK and this workshop
  - Know your audience
  - Learn some techniques for setting the stage in your classroom

# What is The TEAK Project?

- Provide opportunities for KGCOE students to enhance their understanding of engineering by teaching others
- Provide opportunities for KGCOE students to improve their communication skills and confidence
- Create a series of portable kits and web-based activities to introduce middle school students to engineering.

# Why this workshop?

- Provide participants basic teaching skills
  - Apply in middle school classrooms (TEAK)
  - Apply in RIT classes/labs (TA)
  - Apply in outreach events
  - Apply in your career
- Practice teaching exercise(s) and get feedback from an audience of your peers
  - Record and watch video of yourself teaching

# Expectations

- Everyone participates – small groups and full class
- Ask questions
- Be respectful
- Be constructive

# Workshop Outline (syllabus)

Session	Objectives
Introduction, Course Goals, Know your Audience	Be aware of TheTEAK Project, determine your most likely audience, learn some techniques for setting the stage in your classroom.
Lecture and Questioning Techniques	Plan a session that keeps your students focused on the class or lab, be able to pose good questions to the class or lab, apply techniques learned in the workshop to your planned teaching activity.
Blooms Taxonomy	Understand the six levels of Bloom's as it relates to engineering, be able to identify Bloom's level for questions on an exam and develop a sample activity and assessment for each level.
Managing Hands-on Activities	Recognize potential difficulties that may arise in a lab, think about how to time activities appropriately, discuss ways to help students learn from mistakes in a safe hands-on environment.
Managing Problem Solving Sessions	Understand the advantages and disadvantages of different types of recitation sessions and how class size and year level affect success, observe, then develop and run a sample recitation session.
Classroom Assessment Techniques	Recognize the value of assessment and evaluation, learn how to help students learn through assessment, apply techniques learned in the workshop to your planned teaching activity.
Microteaching Session with Peer Observation	Design and deliver a short lesson on an engineering topic, provide constructive feedback to other student teachers, receive constructive feedback on your own teaching, reflect on how you can use the feedback you receive to improve your teaching.
Creating Exams, Homework, Quizzes, Multiple Choice Questions	Understand strategies to assess student mastery of the material relative to Bloom's level taxonomy, create a practice exam, assess each others exam for quality, accuracy and difficulty level.
Grading, Annotation, Rubrics	Understand the difference between grades intended for student motivation versus student assessment, recognize appropriate grading schemes and professor annotation of graded work, create a grading rubric for exam, quiz and homework problems, grade papers using the rubric.
Course Management Software and Best Practices	Demonstrate ability to use the course management system and be able to explain best practices for maintaining accurate student records.



# Setting the Stage

- Planning the event
- Room setup
- Warm-up Activity
- Introduce Yourself

# Setting the Stage

- Setting the classroom environment
  - Attitude
  - Presence
  - Voice
  - Tone
- Setting expectations/classroom behavior
  - Parking Lot
  - Traffic Light

# Warm-ups

- How did we start this morning?
- What did it achieve? (hopefully...)
- Why bother?
- Some ideas...

For more ideas:

<http://www.residentassistant.com/games/icebreakers>

# Activity: Applying Techniques to Your Lessons

## Directions:

- List some expectations you have for your class and ideas for conveying them?
- How can you get your class warmed up and ready to learn?

# Know Your Audience



# Who is your audience?

- Take 30 seconds to write down your potential audience(s).
- Based on the title of your chosen topic/field, are there any words in there that your audience won't recognize? How about...
- ...a middle-school student?
- ...a high school student?
- ...a 1<sup>st</sup> or 2<sup>nd</sup> year RIT student?
- Have we used any terms in **this** session that you don't understand?

# How much time do you have?

- Not time in class...time when you've got your group's attention!
- Varies by age and interest in the subject.
- Not too long for any group!
- Discuss more in a later session...

# Activity: Applying Techniques to Your Lessons

## Directions:

- Come up with a list of words you shouldn't assume your audience already knows. (2 min)
- Get input from a neighbor once you've done your own assessment.
- Share with group.





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