

ROCHESTER INSTITUTE OF TECHNOLOGY
Kate Gleason College of Engineering
Department of Mechanical Engineering

Course: **0304-389 Teaching Methods (Class 1, Credit 1)**

Elective

Course Description: This is a one credit course geared towards students interested in working as Teaching Assistants within the college of engineering as well as students interested in serving as instructors/mentors for pre-college engineering outreach. In future quarters, we intend to use this workshop to recruit, train and select TAs for the Mechanical Engineering Department. We will cover a variety of topics relevant to TA's and outreach instructors

Prerequisite(s): None

Textbook(s) and/or Required Materials: *None*

Course Objectives / Relationship to Program Outcomes (1 = slightly, 2=moderately, 3=significantly):

Course Learning Objectives	RIT Mechanical Engineering Program Outcomes											
	1	2	3	4	5	6	7	8	9	10	11	12
Level 3: Application												
3.1 Apply tools learned in class to an engineering lesson			1							2		
3.2 Demonstrate an ability to use RIT's course management software				1								
Level 4: Analysis												
4.1 Perform a critical self-analysis of lesson delivery									3			
4.2 Perform a critical analysis of peer lesson delivery									3			
Level 5: Synthesis												
5.1 Create and deliver an engineering lesson										3		

Topics Covered:

- Introduction, Course Goals, Know your Audience
- Keeping your Audience Engaged
- Blooms Taxonomy and Asking Good Questions
- Managing Hands-on Activities
- Managing Problem Solving Sessions
- Classroom Assessment Techniques
- Creating Exams, Homework, Quizzes, Multiple Choice Questions
- Grading, Annotation, Rubrics
- Course Management Software and Best Practices
- Microteaching Session with Peer Observation

Class/Lab Schedule: 1 – 1 hour lectures.

Contribution of Course to Meeting Professional Component:

- College Level Mathematics and Basic Sciences = 0 credits
- Engineering Topics = 0 credits
- General Education = 1 credits (free elective)

Prepared By: Elizabeth DeBartolo

Date: March 11, 2012

0304-389 Teaching Methods Supplemental Information

Instructors

Dr. Elizabeth DeBartolo
2051 Gleason
475-2152
eademe@rit.edu

Dr. Risa Robinson
2041 Gleason
475-6445
rjreme@rit.edu

Dr. Margaret Bailey
2061 Gleason
475-2960
mbbeme@rit.edu

Grading

10% completion and self-evaluation of preliminary teaching activity
30% final microteaching activity
20% self-evaluation of final microteaching exercise
20% evaluation of peer microteaching exercises
20% class participation and attendance

Academic Dishonesty

There is a fine line between working together and cheating or copying, and it is often crossed. Working together means all parties are actively involved in a discussion of the problem and each person does his or her own work; this is beneficial to all those involved. Cheating or copying means putting your name on (and therefore taking credit for) work that is not entirely yours. Any instances of cheating will result in at least a 0 grade for that assignment/test/etc, and further action as warranted.