

MATH 2415

Active Learning

John Zweck

Dog One: Tisbe



What is Active Learning?

**We use Active Learning in
our Problem Session.**

With Active Learning you will:

- ① Engage in mathematical reasoning
- ② Solve problems with your fellow students
- ③ Explain your thinking to each other and the TA

How Does Active Learning Work?

- You
 - Actively solve assigned problems
 - Work in small groups of 3-4 at white boards
 - Explain your solutions to each other and to TA's
 - Photograph your solutions
- The TA's and ULA's
 - Check in regularly with each small group
 - Mostly ask questions, but can answer "Yes" or "No"
 - Help you explain math: "*So you are saying....*"

Why Do Active Learning?

Educational Research on STEM courses shows:

- 1 You learn significantly more with an active learning technique than with traditional methods
- 2 Your chance of failing with an Active Learning format is 66% less than with a traditional format

Why Do Active Learning?

Your peers in a UT Dallas Calculus course say:

“The problem sessions, too, were much better than any I’ve had in the past. They were relaxed, engaging, and helpful to my comprehension.”

“The problem sections were much more productive with the students working problems in groups as opposed to another lecture from the TA.”

“The structure of the problem sessions is the best I’ve ever seen. You get to learn by working with others. Allowing us to explain material with a TA’s guidance is highly beneficial.”

Dog Two: Lulu



Why Do Active Learning?

One of your ULA's wrote:

I took Math 2415 in my first semester here at UTD. I am now a senior and the active learning math lab for this course remains the most helpful math lab I've had. The ULA's I had were incredible, they opened my eyes to math being a subject that one can reason about.... I'd really like to help other students fall in love with math like I did through active learning.

Dog Three: Dalila (as puppy)

