# Talk Less, Teach More

#### 1. Benefits of active exercises

- More student engagement
- Increased collaboration
- Increased peer-learning
- Increased attendance

### 2. Types of active exercises (not a complete or definitive list)

- Discussion
- Writing
- Examples
- Problem-solving
- Games or role playing

## 3. Common questions

- Amount of time for exercises ?
- Group size?
- Makeup of groups?
- Assigned or self-grouped?
- Same groups each meeting?
- Drawing out introverted and shy students
- Ensuring everyone has a chance to speak up
- Present results to class, submit to prof, or unshared?

#### 4. Challenges

- Timing the class is harder with active exercises
- The classroom infrastructure has a major affect
- Encouraging collaboration can be challenging
- Encouraging diversity of thinking
- Changing your habits
- Your interaction—deciding when to step in

## 5. **Example exercises** (illustrative from my clases)

- SWE 632—User Interface Design and Development cs.gmu.edu/~offutt/classes/632/in-class/week3-eval1A.html cs.gmu.edu/~offutt/classes/632/in-class/week3-mentalModel.html
- SWE 637—Software Testing cs.gmu.edu/~offutt/softwaretest/edition2/powerpoint/Ch07-1-2-overviewGraphCoverage-active.pptx
- SWE 205—Software Usability Analysis and Design cs.gmu.edu/~offutt/classes/205/in-class/OOtM-Excise-example.html

Jeff Offutt ITL September 2016