## Evaluating & Revising EPIC 265 and beyond...

### CONTEXT
As course instructors, what we may think needs changing, or how to make the change, may not really hit at the root of intended outcomes

### WHAT WE ARE CHANGING
Expanding faculty thinking and mindset surrounding instructional methodologies

### INTENDED OUTCOMES
Demonstrate benefits of incorporating Engineering Learning as measured through enhanced student and program outcomes

### Perceived Needs to Improve EPIC 265:
- Better grasp of relevance
  - for students to understand how daily topics tie to desired design concepts and how the course ties to the CHEN and CBEN degrees and careers
- Improve student engagement in complex problems/topics during in-class activities
to avoid the “I give up, just tell me the answer” syndrome
- Retention of design concepts sophomore year → Senior Design
- Student satisfaction that the course was important, captured their attention, and was really worth the challenge

### Specific to EPIC 265:
- Clarity in Learning Outcomes defines expectations and relevance
- Detailed Course Map explains what we’re doing, and why
- Extending the flipped approach creates expectation of preparation accountability, mentoring how to learn, with less talking at students and more interacting with students
- Varied active learning formats + well-designed activities taps into their curiosity and moves students to a greater understanding
- Planned discussions assists in relevance connections
- Use and explanation of formative assessment creates a less threatening environment as students are not being “graded” all the time

### The PBL/Design Professional Learning Community (our focused working group) is actively collaborating!
- Collaborative activity development
- Vertical alignment
  - EPICS 1 → EPICS 2 → Capstone Design
- Future – coordination of core skills instruction across all 1st and 2nd year courses (e.g., Excel plots, communication skills)
- Future – move repetitive and review content online with online assessment

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Thank you for supporting our faculty!

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**John Persichetti, Teaching Associate Professor, Chemical and Biological Engineering**

*Instruction emphasis: Design (Senior Design & EPICS II), Simulation, Field Session (hand’s-on experiences), Multi-Disciplinary Projects, Innovative Design Concepts*

June 2016 Cohort

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**Recipient of 2016-2017 Alfred E. Jenni Faculty Fellowship**

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