

### OE & Teaching

### ETAT Workshop

#### *Lab-created Learning: Designing Assignments for Meaningful Learning*

Susan Zvacek

Consultant, College Teaching Coach

[Susan@CollegeTeachingCoach.com](mailto:Susan@CollegeTeachingCoach.com)

### Workshop goal

This workshop will introduce concepts foundational to the development of laboratory assignments that lead to meaningful learning. The framework will enable participants to reflect on the instructional activities their students engage in and how those strategies could be refined for greater clarity and alignment with course goals. The participants will have the opportunity to apply evaluative criteria to example assignments and consider the strengths and areas for improvement they might suggest. The ultimate goal is that the workshop participants will feel confident in their instructional design skills for laboratory assignments.

### To whom is the workshop addressed

The activities in this workshop are designed for faculty members in any engineering discipline, especially for those design laboratory assignments. Limited to 10 participants.

### The Methodology

Do your engineering students participate in lab work? This workshop will provide a template for designing learning activities in the lab environment. These guidelines are based on validated instructional design processes and are aligned with accreditation criteria for engineering education programs. To reinforce your understanding, you'll have the opportunity to discuss and evaluate existing lab assignments and consider how you would apply the guidelines to create your own course activities.

At the conclusion of the workshop, successful participants will be able to:

1. Identify the instructional design criteria that are central to the development of meaningful laboratory assignments.
2. Evaluate assignments (created by others) based on the criteria presented in the workshop; and
3. Apply design framework to create new or improve existing laboratory assignments.

The sequence of activities will include:

- Synchronous presentation of the instructional design framework for creating lab assignments, with time for questions and discussion.
- Using breakout rooms, participants will work with one or two others to review existing laboratory assignments, using the framework as presented.
- Returning to the full group, each pair/group will describe their review of the assignments and explain the strengths and areas for improvement of each.
- Wrap-up with final Q and A.

## *expatWS'21* Thematic Workshop Abstract

### The Workshop duration

This workshop will last two hours, with the majority of the time split among the first three activities, as described above.