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### **Redesigning an Advanced Lab Course to Promote Experimental Design**

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The advanced lab course can provide students with an opportunity to develop experimental design skills. However, students often struggle with the challenges and potential for failure that come with designing their own experiments. I will describe how we used results from the Colorado Learning Attitudes About Science Survey for Experimental Physics (E-CLASS) to explore student attitudes about experimental work in a course designed to promote the development of experimental design skills and how we have modified the course through the introduction of metacognitive activities in response to E-CLASS results.