![Portland State Chemistry logo]

College of Liberal Arts and Sciences
Fall 2020 Chemistry Seminar Series
Friday, October 2nd

Dr. Jack Barbera
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Portland State University

Supporting the generation of high-quality data within chemistry education research

Abstract:
Research in the Barbera Chemistry Education Research (CER) group revolves around how educators and researchers measure student outcomes in chemistry. Their interest in the measurement of these outcomes is to improve what the chemistry education community knows about how students learn. In the classroom, their research tools and results help to provide robust evidence of the impacts of various educational practices. In the CER community, their studies provide new or modified assessment instruments that are informed by best practices in psychometrics and statistical analysis.

In this seminar, Dr. Barbera will present an overview of the work that has been conducted in his CER group since moving to PSU in 2015. He will first frame the reasons for why the group's mission is to "support the production of high-quality data of educational outcomes". Subsequently, he will discuss how the group's three interrelated goals contribute to this mission. Finally, within each goal, Dr. Barbera will note the group's current and past CER projects and discuss a few in detail.