

39d Che Safety Training & the Unit Operations Lab Are Synonymous!

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In our unit operations laboratory, students are entering a new environment. They have had limited experience in operating chemical engineering equipment and in handling hazardous chemicals. To boost student competency in chemical engineering lab safety, we have exploited modern learning approaches that encompass tasks that are active, collaborative, and sequential, involving multidirectional communication and student assessment. Moreover, safety is treated with the same importance as other topics in designing the course and in grading student work. Upon completion of the two-semester lab sequence, our students have demonstrated diverse safety skills such as incorporating safety into the design of experiments, completing accident/incident reports, researching safety regulations and methods, and training colleagues in safety. Our students have also exhibited a strong positive attitude by offering concrete, practical recommendations to strengthen safety in our laboratory design, equipment, operations, and training. Feedback from our alumni has been uniformly positive. Our training approach effectively prepares our graduates for transitioning into entry-level positions for competent safety performance and for engaging in safety learning throughout their careers.