

Laboratory Sciences for Distance Education

Heidi Fornes and Jay Bardole

Department of Chemistry, Vincennes University, Vincennes, Indiana

It is a special challenge to design valid experiments as a part of distance education. The experiments must be safe and still deliver valid experiences that illustrate the concepts that we think students should learn in laboratory. The labs need to provide students with experiences that require critical thinking as a part of the analysis of laboratory experiment. We expect students to be able to apply quantitative analysis to the outcome of some of the experiments they do and to present it in a variety of ways, including graphical forms and written explanations. It is an added challenge to ensure that students are actually doing the experiments and are presenting their own work. Since development of such a course in a community college is often done with little release time and little additional pay, we need to find ways to develop an experiment set that is high quality and has minimum time demand.