General Chemistry Course Redesign – an Integrated Lecture and Laboratory Approach

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12:00 – 1:00 PM
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This seminar will discuss a project with undertaking a redesign of the current General Chemistry instructional model by replacing the traditional separate lecture and laboratory sections with an integrated model carried out entirely in the laboratory space. Rather than having passive lecture environments and “cookbook” laboratory experiences, students will have a discovery experience, making their own observations, being guided to the appropriate conclusions and gaining hands-on technical skills. The purpose of this redesign is to better reflect a research experience at an early point in a student’s undergraduate career. Gains will be made in retention of material, confidence in understanding of chemical phenomena, and application of conceptual understanding to solving problems that have not previously been encountered. Students will also grow in their independence and self-efficacy as chemists and scientists. This pilot program will focus on the development of the materials necessary for the new class format, as well as how the department will need to adjust when the integrated model is implemented for all students enrolled in general chemistry.

Chemistry Department Sponsor: Prof. Hannah Sevian