

# Collaborative (Re)design of Ecology Lab Exercises

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Revising the curriculum of undergraduate biology courses with lecture and laboratory components presents a challenge because the personnel tasked with course design (professors, course coordinators) often do not have direct experience with teaching the labs. Here, we present a new collaborative approach to biology course redesign that combines the expertise of both faculty and graduate student lab TAs, through the framework of a graduate seminar. This graduate seminar approach was successfully used at Ohio State University in Autumn 2015 to redesign the laboratory component of EEOB 3410: Ecology. The redesign was strengthened by including two faculty members who were concurrently teaching the Ecology course and supervising lab instruction, GTAs with prior experience teaching the labs, and other GTAs with pedagogical expertise who had not taught in the Ecology course and therefore brought an outside perspective. This approach benefitted Ecology students and instructors, and also provided a valuable professional development opportunity for GTAs in the seminar. This method is especially valuable for frequently-taught courses that lack centralized administration. We present our approach as a method for collaborative design of teaching materials, discuss specific labs developed through the seminar, and suggest ways that other departments could adopt this method for their courses.

**Keywords:** collaborative teaching

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