

Assessment of Course Design, Student Learning Outcomes, and Student Attitudes in a Combined Human Anatomy Lecture and Lab Course

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Undergraduate students that apply to professional schools (nursing, dental, optometry, pharmacy, etc.) are required to complete a human anatomy lecture (and sometimes lab) course prior to admission. In order to meet this growing demand at the University of California - Irvine, a novel combined human anatomy lecture and lab course has been developed and was taught for the first time in the Spring 2014 quarter. Students received a combined grade for this highly structured course that included three hours of lecture a week, three hours of lab a week, daily pre-class assignments, active learning activities in class, and weekly review quizzes. Students were asked to evaluate the lecture and lab components, including Mastering A&P, an online virtual cadaver (Practice Anatomy Lab), Learning Catalytics, and lab activities using anatomical models. Student performance in the course was evaluated based on prerequisites (prior completion of a human physiology lecture and/or lab course), major (biological sciences versus nursing sciences), and other student demographics (GPA, year in school, etc.). Students were also asked to self-report their confidence in being able to achieve the course goals and their attitudes towards the anatomical sciences in a pre-post-test format and these data were compared to student performance on summative assessments in the course. The results from this study will be of interest to instructors who currently teach human anatomy lecture and/or lab courses as it aims to identify best practices for teaching human anatomy.

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