



ANATOMY AND PHYSIOLOGY I

Anatomy and Physiology I (API) is a gateway class to careers in allied health. Nationally, Human Anatomy and Physiology courses are believed to have among the worst undergraduate course failure and withdrawal rates (Hopper, 2011). Success in Anatomy and Physiology courses has been shown to be an excellent predictor of success in nursing programs (Lewis & Lewis, 2000). Therefore, in order to be competitive for admission to nursing, medical, or physical therapy programs, students need to be successful in API. Based on personal experience, most students are not prepared for and have not had experience with the rigor that comes with API in which 16 substantial chapters of material are required in 15 weeks' time. In this case study, we used known theories of behavior change such as Contract Learning and component of Self-Regulation known as self-monitoring (t-mecards) that have worked to improve student success (Frank & Scharf, 2013; Sebesta, & Speth, 2017). In order to perform well in API, students need to hold themselves accountable and also know exactly what will be required of them in order for them to be successful. Many students underestimate the time required to learn large amounts of material (Bash & Kreiner, 2014), which can lead to time management issues and poor performance. To make students more self-aware of their actual study time, students were required to keep t-mecards of their study time for API. Data suggest that students who study longer hours (Sturges et al., 2016) and work less hours (Harris et al., 2004) are more successful in Anatomy and Physiology classes. Thus, the contract and t-mecard intervention serve to provide s A s e se se

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CONTRACTS, AKA "H A H L H A H"

Students often underestimate the amount of time required to learn so adding the timecard component enhanced the findings over using the contract alone to allow students to visualize the amount of time they are devoting to studying. Additionally, given the rigor of this class, an understanding of student demographics influencing course grades will initiate further interventions targeted toward specific groups or suggestions related to specific preparation prior to taking this class. There are also numerous studies that indicate a contract can make people more aware of their behavior and result in a positive change. The results were a considerable increase in the number of As over previous semesters. It appears that making students more aware of what is required, how much they are studying, and requiring them to make a study schedule can result in improved performance and warrants further future investigation.



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Karen Perell-Gerson

Victoria Bali

Wendy Dustman

Rebecca Fiorillo

Caroline Hanson

Rebecca Kalman

Xiaoping Li

Julia E. S. Shearer

Problem-based learning (PBL) is used in healthcare professional programs because educators recognize students separate theoretical knowledge from practical knowledge. PBL equips pre-nursing students with active learning and scientific literacy competencies. In the current study, pilot sessions occurred in Spring 2020 with 2 PBL tutors and 10-15 students/session. Sessions included review, PBL activity, wrap up, and assessment. Participants (100%) felt the session length was just right. Most (89%) felt the PBL session increased their interest/skill level. All (100%) felt they studied more effectively and were more independent learners due to PBL sessions.



Problem-based learning (PBL) pedagogy focuses on students identifying and resolving problems from a real-case scenario, usually in small groups through self-directed learning facilitated by peer tutors (Li et al., 2019). PBL is often used in healthcare professional programs because healthcare professional educators recognize that students often separate theoretical knowledge (the knowing that) from practical knowledge (the knowing how) (Benner, 1984; Craddock, 1993; Ehrenberg & Haggblom, 2007) leading to a theory-practice gap. Researchers (Sackalingo et al., 2019) have shown that PBL can help bridge this gap by providing students with the opportunity to apply their theoretical knowledge to real-world scenarios.

