BEYOND THE SHADOWED FOREST: THE USE OF PHYSIOLOGICAL TECHNIQUES TO MEASURE COGNITIVE LOAD CHANGES IN ORGANIC CHEMISTRY STUDENTS

Virtual Seminar

Monday

February 6, 2023

3:00 – 4:00 p.m.

Online via Zoom

Meeting ID: 987 4013 9377

<u>Passcode:</u> 542330

Researchers have long recognized that there is a limit to the amount of information that the working memory can process simultaneously. Anything beyond that limit will lead to cognitive overload for many adults and severely interfere and inhibit the learning process. The collection of physiological data such as heart rate and EEG has been established as a valid and reliable method for measuring changes in cognitive load, and with recent advances in technology, can be collected unobtrusively in real time. Over the past few years, our research group has been interested in developing profiles of load inducing topics and skills from a variety of chemistry coursework. This presentation will highlight that work as it relates to students learning organic chemistry.

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