



Face-to-face vs. Online Asynchronous Teaching in a Conservation Biology Course

(In press with *Online Learning Journal*)

Dr. Carrie Wells and Dr. Michelle Pass

Department of Biological Sciences

University of North Carolina at Charlotte



Introduction to Project

- Asynchronous online course design = Student works at their own pace on coursework and there are no designated course meeting times or lectures
- We wanted to compare a traditional face to face Biology elective course to an asynchronous online version to test for differences in learning outcomes
- **Biol 4244, Conservation Biology** (Writing intensive, Evolution oriented)



Research Question

- We compared a variety of learning outcomes between students taught using a traditional face-to-face lecture, and students taught in an asynchronous online environment
- Pre- and post- course surveys consisted of 25 questions based on demographics, course learning objectives, and student perceptions about written communication development.



Results

- There were no significant differences between the modes of course delivery (face to face and online asynchronous) for any of the measured outcomes
- No significant differences in exam grades between modes of delivery
- No significant difference in the mean final course grades between modes of delivery
- No significant difference in collaborative writing project grades between modes of delivery

A light green circle is located to the left of the title text, partially overlapping the letter 'T'.

Take away message

- Overall, we feel that this study indicates that online instruction in this type of course is a viable alternative to face to face instruction.
- We feel other educators can use information gained in our research to plan and design similar online courses.
- For more details, our paper will be published in the *Online Learning Journal* in September 2022