**Hands-On Teaching in an Asynchronous Environment**

A challenge I have in teaching computation online is not being able to interact with the students in real-time and see when they are struggling or especially when they are confidently doing the wrong thing. My in-person technique was to leave plenty of class time for me to walk around and give tips and pointers to the class and students as they worked through the material.

The best thing I’ve found so far is to keep encouraging students to contact me. This sometimes leads to one-on-one sessions via Zoom or Teams that mimics the interactive activities that I had in in-person courses.

As far as an entire class, I don’t have a good solution as of yet. Due the courses being asynchronous, it isn’t possible to have the students interact with each other as well. Or to be in a group and to have more confidence to ask questions with others doing the same in a scheduled time period.