Teaching Reflection, Fall 2020

This was a truly historic semester. We started in a hybrid format and were eventually forced to go fully online partway through the semester due to the COVID-19 pandemic. This was my first experience with teaching in a synchronous online environment. While it was a very hectic and trying semester in a lot of ways, I learned a lot from it and I believe created an overall positive experience for my students despite the inherent difficulties we endured.

I'll start by discussing my two sections of Precalculus. I have taught this course several times in the past, but not yet at SUNY Cortland and certainly not during a pandemic. This course was taught in a hybrid style with 1/3 of class attending in person on each day. I originally started the semester in a partially asynchronous format, where I posted two 30-45 minute videos with accompanying worksheets. The students were expected to work through the worksheets and accompanying videos, and then in class we would go more in depth and work in small groups. Due to the social distancing, group work was nearly impossible. Students were reluctant to speak with one another. I ran the course like this until the first exam, which had lower scores than I generally aim for. After this, I switched the style of instruction to consist of more straightforward lessons, taught via sharing my tablet screen and writing class notes while giving a lecture. Reluctantly, I eliminated group-work from the course. Students would generally not turn on their cameras or participate at all if they were attending remotely, which was discouraging. As far as assignments go, I had each student turn in both a written and online portion of a homework each week. Unfortunately, I had four students submit plagiarized work, so I had to have a classroom discussion on academic misconduct. I will need to think about how I can prevent this in the future. I made myself available for Webex office hours each week, though they were underutilized by the students. Overall, I think the students appreciated that I was doing what I could to keep some normalcy to the class and get them through a material-heavy class in less than ideal situations. My overall average medians per questions were 4.55 and 4.6, so overall I was pleased

with the results of the CTEs. The students at this level seem to acknowledge when you're giving them an option of extra help or consideration, and are grateful even if they aren't necessarily taking advantage of such opportunities.

The other course that I taught this semester was Algebraic Structures. I taught this the previous semester, and modified the course to move a little slower an to take advantage of over 120 pages of guided lecture notes which I prepared which I didn't have in the previous semester. I brought my expectations down to a more realistic level, and was as flexible as I could be with homework given the circumstances. Learning proof-based mathematics is difficult in the best of times, and extremely difficult in a remote setting. This was a smaller class, so due to social distancing, I was able to have half of the class in the room and the other half attending remotely on any given day until we were required to move entirely online. I attempted with varied success to institute some aspects of my linear algebra course from the previous semester. I believe that the guided lecture notes helped keep those attending remotely engaged. One major benefit of the guided notes is having practice problems built in to the lecture, though the hybrid format prevented these from sparking any class discussion. I once again tried to have a vocabulary assessment built in to the course in the form of 'Definition and Theorem Checks', but because these only work as in-person assessment and as many people had to miss class due to quarantine and we eventually transitioned to fully remote, I had to abandon these assessments.

As for homework, at first I had weekly written homework assignments as I did in the previous semester, though I tried to make the assignments less easy to find solutions for online. However, I was forced to deal with at least three students who plagiarized work from online sources, and others who shared their work with each other. Due to the rampant plagiarism, I switched to a system where I gave weekly practice homework problems which were not for credit accompanied by timed quizzes, which contained problems that were very similar to the practice problems but, once opened, had to be completed and submitted within 30 minutes. This worked to put an end to the plagiarism issues. Once we were forced fully online, this facilitated group discussion better than the hybrid settings, as I could put students into breakout rooms to discuss problems together. I would really like to have more small group work in this class in the future. My virtual office hours were well-attended, however due to the students not being able to show me their work, they usually consisted of me writing instead of encouraging the student to write and show the work for themselves. Overall, this was a difficult semester but most of the class

worked very hard. As far as CTEs go, I increased my average median to 4.25, which is more to my standards than the score from the previous semester.