Course Summary

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MSE 601

**What I learned.**

I learned (and re-learned) a lot in this course. It provided a good general refresher on lab safety, bias detection/plagiarism, academic honesty, and writing skills/resources.

More particularly, it is always beneficial to have occasion to read through the MSE grad handbook again. Dr. Li did this with us and Jessica Economy went into it with even more detail. For example, I was unaware that my master’s thesis can satisfy my writing requirement. This should not be of consequence for my degree requirements, as I plan to publish manuscripts. However, it could expedite some of the procedural hurdles like admission to candidacy.

I also found the insights from the DOE interns to be informative. I had not thought explicitly about the lack of engineers entering this field and how that might affect the supply and demand of good paying nuclear engineering jobs. The fellowships also pay better than I would have anticipated (52,000 if I remember).

Yitzy Paul proved to be a very good guest lecturer. I have had trouble in the past accessing recently published research articles. Yitzy informed us on a program for leasing articles from other libraries.

Another thing that I had never heard explicitly stated is that, for example, “no more than 2 pages” for assignments, grant proposals etcetera, means exactly 2 pages. I believe this was said by Dr. Li in a lecture. This struck me as mathematically peculiar. Why not say 2 pages? Or maybe I misunderstood what was stated. Anyway, for this course summary assignment, I aimed for 2 pages but ended up with greater than 1 (but less than 2) pages. I hope that this is sufficient.

**How will I apply.**

Explicitly discussing the manuscript-based approach got me thinking more concretely about how to plan and monitor my progress toward completing my PhD. I will continue this going forward and this will inform how I will attempt to form my committee.

I have also signed up for the VASP course, and plan to use ab-initio insights to guide and justify my research moving forward. With any luck, it can lay the groundwork for a manuscript.

**What I feel about my preparedness for grad school and profession.**

I feel very prepared for both. Admittedly, this feeling is relative to how I felt in 2020 when I first entered the MSE program. At that time, I felt an infinitesimal preparedness. At that time, I had no scientific training and my mathematical training had not been exercised in ~5 years. I thought there was a high probability of failing the core courses and proving useless to my PI.

I now have scientific training and evidence of my ability to complete coursework and contribute to computational and experimental research. Furthermore, I have seen that PI’s and professors in Boise State MSE want us to succeed, not only because it benefits their research goals, but because they are rooting for us as human beings. This contrasts with my undergraduate professors who were (for the most part) soulless talent accessors. It is with all this in mind that I feel good about my preparedness.