On a scale of 1 to 10, how relevant is the course material (10 being most relevant)? Any comments?

10,10,10, 8. For anyone considering working in industry or with fuels this is a great overview of important parameters and the ways to perform analysis.

# On a scale of 1 to 10, how much of the course material has been covered in previous courses (10 nothing covered, 1 everything covered)? Any comments?

8, the part related to the stress and strain curve and stress tensor are covered in other courses

8.

This is my first class, so I have no reference for this.

5. (Take this with a grain of salt since I came from UF), but a Reactor Materials course had a fair bit of the qualitative elements in this course. I took it a while ago so either way it’s good to have this knowledge regained. Overall, there was a lot of novel information especially about non-LWR fuels.

On a scale of 1 to 10, how does this course meet your expectations? Any comments?

8

9.

8

8. I enjoyed this class and its contents. It’s difficult to say if more detail would be nice since it is supposed to be a broad overview, but possibly some neutronics-related considerations would be nice.

How was the pacing of the course? Too fast? Too slow?

10/10

Just right.

Overall I think the pacing is good.

Right on the money with the pacing.

Was the MOOSE project useful? What could be changed about it?

The recommended video wasn't as helpful as expected, the website documentation is more efficient and part3 needs to be more clear.

It was most useful. It could include more topics like, e.g., contact. Things like the temperature-dependent thermal conductivity could have been introduced in part 1.

It was useful, I think there could have been a bit more instruction on implementation of tensor mechanics into the moose code.

This is going to be a bit obvious as to who wrote this, but I did have some difficulties with the MOOSE projects. I definitely like the idea of using a code to make a thermo-mechanical sim, but the lack of clear documentation with MOOSE (there were a lot of examples on their website, but there are so many nuances that are never explicitly said) takes away from the actual fuel experience. And with how widespread MOOSE is it would be difficult to recommend against using it. Maybe some slides on a crash course to writing input files? LANL has a ton of those documents but for MCNP, I’m curious as to whether those exist for MOOSE somewhere.

Do you have any other comments or feedback on the course?

4 exams is a good approach, but still some questions look to have a very long answer which affects the dedicated time for the rest of the questions.

Deeper coverage of the finite element method (e.g. adding the meaning of weak and strong forms) and tensor mechanics (e.g. adding the meaning of von Mises stresses) would have been very useful. The stuff on oxygen chemical potential is not so obvious. Otherwise, the course is very informative in a lot of topics.

I really enjoyed it overall!

Other than that, no other comments. Solid class.