

Tips from the Grad Advisor to PhD students preparing their exit seminars

Goals: The PhD exit seminar in SEOS has three goals. The research done by SEOS students drives the department; we want to know what you've been up to and celebrate your achievements! Since your defence presentation is quite short, the exit seminar gives you a chance to go into more detail in presenting your work. A long seminar is very popular format for academic interviews, so this is a chance to practice with a friendly audience.

Timing: Aim to speak for no longer than 45 minutes. The remainder of the 60-min time slot is for audience questions. In SEOS, we prioritize questions from students.

What to talk about: Even a 45-minute talk is too short to present your whole dissertation. You have to choose what you want to focus on. Maybe you can really only get across up to 3 key points. What do you want SEOS to know about your work? This exit seminar is your chance to share what you thought was most interesting and important about your science! Once you identify those few key points you want to get across, craft your whole presentation around them. As you think about what to include in your talk, ask yourself if it helps your audience understand those key points and why these are important. If not, it probably doesn't need to be in this presentation.

Pitching your title and presentation: Remember that SEOS is a topically diverse department, including geological, geophysical, oceanographic, and atmospheric sciences. Write your title so anyone in SEOS can understand it. Check in with a SEOS student colleague in a different discipline to see if they fully understand your title. Remember to put your name (and your supervisor(s)'s name) on the title slide.

For your talk, design it so that everyone in SEOS can understand your main research question, why it is important, and your main conclusions. Necessarily, some parts of your talk should be technical and not everyone will understand those parts. Your aim should be a good balance between keeping as much as possible broadly understandable, and sufficient detail so that experts get something out of it. Think about the seminars you've seen outside your own sub-discipline. How were the effective ones presented? What did those speakers do that helped you get the most from their seminar? Get your supervisor and grad student colleagues to look over your talk for advice on this. Don't assume that the audience knows all the relevant literature or terminology of your sub-discipline. Probably only your supervisor has read and remembers the relevant papers for your project, so take care to explain required background knowledge for the SEOS audience. Use as little jargon as possible.

Slide development: I put together my slides to try to tell a coherent story about my project. I keep text to a minimum on my slides. Usually I have one large figure, a title and one or two concisely worded bullet points on each slide. Long paragraphs of text don't work well because your audience will spend time reading your slide instead of listening to your talk. I usually have about ~30 slides for a 45-minute talk. Others have more, because they spend less time on each slide than I do and others have fewer. This is quite individual. Make your font sizes big enough

for the audience to read from the back of the room. Your fonts need to be at least 24 pt to be readable. Make your axes fonts that big as well. Main text should be at least 28 pt. If you have a figure excerpted from a paper with small fonts, add text boxes over the original axes with bigger font. Ensure figure resolution is high. Sometimes when you copy a figure from a paper the resolution can be very poor if not done correctly. Often it's better to simply replot the figure if it's important, or not show it if it's not.

Practice!: Practicing your talk is important. It's very easy to misjudge how long it will take to explain something, and you'll feel more comfortable and have the words you want ready in your mind if you practice. The 45-minute seminar talk is an extremely popular format across academic departments, as you will have seen in SEOS' weekly seminar series, so your supervisor has certainly given several and will have further advice for you. Here's what I do. I practice my talk out loud, pointing at my screen as I intend to during my talk. I time this. The first time through is always too long because I find things I want to change in the slides and stumble through some things. If the second time through is still too long, I cut out slides or points until it is short enough, thinking about my 3 key points. I particularly memorize what I plan to say for my first slide or two. This helps me, because I'm always more nervous at the beginning of my talks. After the first two slides, I find it easier to think of the words I want, so I don't need to rely on memorization anymore. Also note that in our field, reading your talk is not considered appropriate.