Guide to giving an effective prospectus or thesis/dissertation presentation for the Department of Biology, University of Mississippi

As you plan for your prospectus or thesis presentation, keep in mind that:

- 1. You should be preparing your talk well in advance. At least two weeks before the presentation date, and ideally a month. The week before your talk should just be practicing and making minor edits.
- 2. Practice. Practice. Practice Practice alone but also practice with your advisor and fellow graduate students. You should be able to give your talk without reference to notes, slides, or any other sources.
- 3. Plan for and anticipate questions. Encourage others to criticize your talk. Practicing to a receptive audience is not as beneficial as practicing to a critical one.

At minimum, you should make sure that during your talk and the subsequent questions you demonstrate that you:

Convey your knowledge of the material

Do you understand your specific area of research? Can you explain your research so that a non-specialist can understand it? Do you know of other studies that have addressed similar research topics? Do you know of other scientists/publications/research groups/concepts that relate to your study?

Employ the scientific method

What is your main, overall hypothesis? How did you come up with that hypothesis and why? How did you/how do you propose to test that hypothesis? What statistics or other analysis methods do you plan to/ did you apply to your data? What conclusions did you/do you expect to draw from your study?

Place your work in a larger context

How does your research project relate to your specific field (e.g. plant community ecology, microbial developmental biology)? How does your project relate to your broader field of biology (e.g. ecology, microbiology)? How does your project advance our knowledge of biology in general? What are the general findings from your study or that you expect to find from your study? Why is your research important?

Present your research project in an organized manner

Does your presentation have an ordered structure? Do you introduce the general research area clearly? Do you introduce and present the rationale for your specific research project in a logical manner? Are your hypotheses and questions presented clearly? Are your methods described so that they are easy to follow? Are your statistical and data analysis approaches described clearly and in a way that the audience can understand? Are your slides visually appealing? Is all of your text clearly visible and easy to read? Are your figures and/or tables clearly labeled and easy to interpret? For projects with multiple parts (typically dissertations), are the connections between the different parts explained clearly? Does your talk run approximately 15-20 min (MS prospectus), 30-40 min (MS thesis, PhD prospectus), or 45-50 min (PhD dissertation)?

Design your presentation to be of interest to a general Biology audience

Is the content of your presentation tailored to an audience of faculty and graduate students in different fields of biology? Would an ecologist understand your research? Would a cell biologist understand your research? Have you practiced your talk with graduate students from different research labs? Why does your research matter? Can you explain how your research adds to the knowledge base of your sub-discipline of biology and to biology in general? How is your research novel? Can you explain why your research is important to society?

Keep in mind that your prospectus presentation is your first public presentation to the Department of Biology. Giving an excellent presentation will generally result in faculty and your graduate student peers viewing you (and your advisor) in a favorable light. Similarly, your final thesis or dissertation presentation is your public exit; it is in your best interests to end your graduate career at UM on a high note!