GUIDELINES FOR ORAL PRESENTATIONS

The most important rule: Learn from experience.

We have all experienced the agony and the ecstasy of oral presentations. The dull talk vampires the life out of our veins and the invigorating joy of an inspiring, engaging presentation. As a student, you have a secret weapon: you have to experience both these extremes and all the variety between, not just once, but over and over. Use this experience to figure out how to give a great talk. Observe not just the content of the talks you attend, but the way in which they are delivered. You’ll soon be out-lecturing the lecturers. The following are some suggestions to help you on your way:

General:
• Make sure your talk has a story to tell and that the talk is designed to carry the listener smoothly through this story. Ideally, this story will have an introduction that tells us where we are going, a few main points, then a conclusion that recaps where we have been. Stick to your plot and avoid lengthy asides, especially off-the-cuff asides.
• Know how long you have and don’t run over time.
• Show up early and make sure your slides are saved on the computer that you’ll be working from; also, check that the slides work with the version of the software that is on this computer. Please don’t wait until the last minute to do this. If there are problems, you’ll slow down the rest of the class.
• Practice your talk in front of other people before you deliver the “real thing”. Even speakers with years of experience have to practice. So, do yourself and your listeners a favor and don’t wing it.
• Don’t read notes verbatim. Prepare a few notes and speak from them. Again, this is hard to pull off without practicing; but it is easy to do after a few dry runs.

Speech and demeanor:
• Start the talk by greeting the audience – for example, “good afternoon” or “thank you for coming”. Then explain the general topic of your presentation before launching into the deep waters.
• Face the audience – try not to talk to the screen. Look them in the eye. Failing that, look out at them, just above their heads.
• Be positive. Don’t slouch, or talk to your shoes, or mumble, or speak in a manner that conveys boredom or disinterest – be happy to be there and communicate this delight to your audience. If you don’t feel it, fake it. A smile and a bright manner goes a long way to winning over your audience.
• Don’t be too familiar with your audience. You are in charge. Act like it.
• Try not to skulk behind the computer console. If necessary, get someone else to sit at the computer and click your slides forward for you. You need to be out front engaging with the audience. Standing to one side of the front row and talking diagonally across the audience is a good approach – you won’t be blinded by the projector and a diagonal attack is a classic theatrical trick.
• In a group presentation – don’t cluster and hide behind one another. Spread out, face the audience and win them over.
• Do not fiddle with pointers, pens, buttons, etc. If you tend to fidget, just fold your hands in front of you and stand up straight. It is OK to look a little formal during a talk.
• Speed kills – take time to explain difficult ideas; give people’s brains time to keep up with you. We tend to talk fast when we get nervous. Therefore, make a conscious effort to slow down.
• Don’t try to turn your talk into a comedy act. In particular, jokes made at the expense of others or humor with potentially offensive content is unlikely to win over the audience. However, a little light-heartedness can leaven an otherwise heavy talk; just be careful to keep the focus on the content of your talk.
• Thank the audience for their attention at the end of the talk. Don’t say “Uh, that’s it.”
• Speak clearly, and don’t use fillers such as “like, uh, um, OK, you know, so”, and etc. These are very distracting.

Slides:
• All your slides should match in background, font, font colors and general layout. It is very distracting for each slide to have a different background.
• Generally each slide should convey just one or two points.
• Font size. The slides (including figures and graphs) should be easy to read from a distance. Generally, graphs pasted in from Excel or from a print document will need modifying to make them screen-friendly. This is another reason it is good to check out your slides in plenty of time before your talk.
• Music, cartoons, effects, funky colors, and other tackiness. Avoid all special effects unless they are relevant to the main points of your talk. A cartoon that serves as a metaphor for a key concept is appropriate; a cartoon added to get a cutesy look or a cheap laugh is not. An animation that illustrates an idea is great; all other whiz-bang effects are to be avoided.
• Don’t use the slides as a crutch. You should be the main source of energy, organization and communication in the talk.
• Don’t spend a lot of time reading off the slides, but do refer to them. Generally, you should point to figures or pictures. Don’t flash them up and then ignore them.

General guidelines for the content of a research talk:
Here are some general hints for a successful research talk. If you are doing a presentation in a class, your professor will probably give you some specific guidelines for the class.
• Your talk should be divided into sections that mirror the sections of a scientific paper:
  o Start with a title slide that includes the names of all presenters.
  o An introduction to the topic, including a brief review of the relevant conceptual or empirical background material, then a clear statement of the hypotheses to be tested and/or the purpose of the study. This is very important: you must make your audience understand the main question(s) of your study. Take time to explain it.
  o An overview of the methods you used. Minor technical points can be left out (such as the type of glassware you used, unless it is relevant to their understanding of the methods). Be sure to hit the major things such as your controls, variables, treatment levels, and replications, as well as the methods used. If you can get some photos of the setup or field site, that usually helps.
Don’t forget that Methods also includes what you did with your data once you got it (any calculations and/or statistics).

- **Results:** A description of what you found. Do not present the raw data tables or graphs of raw data (unless there is a particular point to make from them). Pay particular attention to making your graphs and/or tables clear, simple, and easy to understand. When you put up a figure, take the time to describe each axis of a graph – e.g., “this figure shows how mitochondrial respiration rate is dependent upon the concentration of mitochondria in the culture; the x axis shows the concentration of mitochondria, the y axis shows the respiration rate as disappearance of DPIP. Note that the graph levels off at 20 mitochondria.” And be sure to explain how the different treatments might be represented. Even if there is a legend – explain it. Too often people whiz through data slides without giving people a chance to view and understand what is being presented. Do not just put up a figure and say “So, here are our data”, stand there and look around for five seconds, and then go on to the discussion.

- **Discussion:** Restate the hypotheses/purpose of the study and clearly describe how your findings relate to your hypotheses (do they support or not support your hypotheses?). A certain degree of self-critique is good – but completely denigrating your data is not. Be sure to point out and address any potential major weaknesses in your study. You can then place your work into the context of the previous work in this area. It is also appropriate to suggest future hypotheses, lines of work, or ways to fix things that went poorly.

- **Acknowledgements:** It is usually good to end a talk with a slide acknowledging those who made the study possible such as funding sources, professors, etc.

8 minute overviews of papers:

Your goal is to give the audience a sense of the paper’s main themes. The only way to do this is to leave out all the details. A good structure for the talk would be:
1. What is the key question or hypothesis in the paper?
2. How did the authors address this question?
3. What were the main findings and conclusions?
4. Give your assessment of the paper: pick one strong point of the paper, one weak point, and suggest one avenue for future work.

The following websites have additional suggestions for giving scientific talks: