A. Talk content:

1. Start out simply. Tell a story that anyone in the audience can understand. Link some of the main problems into an opening line that will capture the problem, something vivid, memorable.
2. Tell the audience what the general problem or problems are. Although some members of the audience will be familiar with your work, many will not and will need some help. They are smart, but you need to tell them why you think you have an interesting problem and why they should care.
3. Give the audience a road map. Tell them what you are going to tell them. Give them the structure, the logic.
4. Summarize main points along the way. Don’t assume they have followed everything you have said. If you have structure to your talk, then you can summarize at the key junctures. Give sound bites and take home messages. Do this often.
5. Anticipate questions by being explicit about the kinds of things that are weak in your analyses or things that are incomplete that you are working on. By being humble about your work, you will fend off rude questions from the audience.
6. Think about who you are talking to. Try to work out ways to engage the audience members. Chances are, you will be talking to a diversity of people. There are always things you can say to engage people outside of your core area.
7. Typical seminars: Plan your talk for about 45-50 minutes so that there is time to have questions. Chances are that for a 45 min talk, you will actually talk for 50 minutes, so plan accordingly. Here’s another issue: when you are talking to a broad audience, you will want to move more slowly through the material because you can’t assume that everyone will know the jargon or be able to read your data slides with the same level of efficiency as an expert. Walk people through the slides. This takes time. Plan accordingly.
8. It is always best to give a talk without having to read the material. If you need to use notes, then make sure that you can readily see them. Thus, I would recommend printing the key ingredients in a large font on index cards.
9. Conclude your talk by reviewing the main points. If possible, come back to your opening story and link up with the material you presented. I like to leave off with potential future directions. And remind audience of the important themes or ideas to emerge from your work.
B. Technical details pertaining to slides, video, audio:

1. Use large fonts for your slides. I never use anything less than 24 pt. and use 36pt for titles. I like fonts such as Helvetica or Verdana. They are clean fonts. These are guidelines that will serve you well for any kind of auditorium. In general, bigger fonts are better, and less material per slide is better as well.

2. Red is a terrible color for text. It is fine for lines on a regression. Use dark colors for fonts. Don’t use a lot of colors --- it is very distracting. Basically, there are two ways to color a slide: dark fonts on white/light gray background, or light font colors on dark blue/black backgrounds. If you like light on dark, then don’t use red or blue as font colors. They bleed and are impossible to read.

3. Walk the audience through your slides. Tell them what the axes are, what the variables are and the measurement units. Don’t assume that they know what the graph means.

4. Don’t put more on your figures then you need. If you have a table, you should only present the material that the audience needs to see. Large tables with lots of information, but only one relevant row, are disasters. If you have a regression with lots of data points, but the regression line is the key piece, put the data points in a dark color, and the line in a bright colorful one. For example, put the data points in black and the line in red. This will automatically grab the audience, and have them attend to the key piece – the line.

5. For slides with text, keep the amount of text to a minimum. It is better to have more slides with less text than fewer slides with more text.

6. When axes have numbers, put the fewest labels possible. Remember that a figure on a slide is different from a figure in a paper. If, for example, you have a y-axis with percentages, all you need is 0% and 100%; show the gradations in between with tick marks.

7. If you are presenting audio or video material, add on at least 3-5 minutes more than you have planned because things always take a bit longer during a talk.

8. The challenge for all speakers is finishing on time. This means allocating an appropriate number of slides. For a 50 min talk, somewhere between 45-50 slides is about right. Remember, some of your slides will be simple pictures that enable you to make a simple point effectively, while other slides include data or methods and thus, require careful discussion. Remember that your audience has never seen your slides and thus, will need to orient. If it is a data slide, use a laser pointer to orient your audience. For slides with text and multiple points, I like to take advantage of powerpoint to introduce each point sequentially, and then gray out prior points. This allows audience to follow the point that you are currently focused on without being distracted by the other points on the slide.

9. Powerpoint can be dangerous! Don’t use all the bells and whistles. Don’t have your text animate in with flying titles or characters that drop out of heaven or rise from hell. This is unnecessary. Don’t use complicated backgrounds or borders. In general, use naked slides: the only thing on your slide should be information that you plan on discussing.
C. Talk style:

It is of course not possible for one person to give an objective assessment of
talking style, nor to provide coaching that is for everyone. Here are, however, a
few personal tips.

1. There is a fine line between a stand up comedy routine and the desiccated talk
of the Sahara. Humor is good to break up the flow of a talk. But use it wisely.

2. Even the most avid scientific audiences need a break from the intensity of data
slides. Find ways to take such breaks. Step back from the data and summarize,
find analogies, use slides that are artistic or schematic or metaphorical, use
quotes from scholars in the field or outside it. These pauses are helpful to an
audience. Again, moderation is key.

3. If you have largely been talking in a dark room, try to end with the lights up, no
slides, and a set of summary points. Even audiences that are keen on your
talk, will dose off. Make sure they leave with the punch lines.

4. Try to monitor the pulse of your audience as you go along. If you feel as
though you are losing them, it is sometimes possible to take stock, and try to
emphasize some key points. This is not easy midstream, but if you plan ahead, it
is possible.

5. Modulate your speaking voice. A talk given at 100 miles an hour is boring, as
is one that is excited about every point. Take pauses between slides. Emphasize
key points, telling your audience why it is important and why you are excited.

6. Answering questions. There is an art here. The temptation, when asked a hard
question, is to answer quickly. Take time to think if you don’t have a ready
answer. If you don’t have an answer, or are unsure, better to say that you need
to think about this some more and would like to talk to the questioner after the
session. If you know that you will not be able to get to all the material you have, it
is often a good strategy to bring extra slides along. If you are really savvy you
can even plant questions in the audience so that they will ask you about data that
you have in your back pocket. If you don’t understand a question, ask the
questioner to repeat. In answering questions, especially in a big room, it is often
useful to restate the question and then answer. This has two advantages. First, it
lets the questioner know that you understood the question, and lets’ audience
members re-hear or hear the question.