Remark: In this lecture we begin to emphasize the importance of the oral presentation, and steps to be taken to succeed. This lecture marks the end of the first quarter of the lecture notes, and students need the same amount of time to present their mid-course presentation.

Introduction

It should be brought to the students' attention that the chart under "Essential thoughts in this lecture," that is described in each issue of this lecture-note series is there in order that the students incorporate similar charts in their future reports. In our experience, we also need to remind students to look ahead and do their work in a manner that this is their last and final presentation. In other words, they should expect to prepare several drafts of their final report before submitting.

Steps Towards Oral Presentations - Phase I

Students are reminded that soon they are required to give a brief presentation of their project. To that end the following list of items, which must be incorporated in their presentations should be read in class. But first, let us assume that we have an audience for these presentations, which consists of department faculty and other students in this class (or possibly visitors from other classes). Also, in this audience we have a group of outside visitors, who are members of technical staff (MTS) of the company that sponsors this project. These are as follows.

- (1) engineers at all levels (from the manager to the field engineer),
- (2) staff from purchasing and finance,
- (3) staff from research department with advanced degrees, and
- (4) Director, who can veto the entire project.

The notion of talking in front of all these people may make you nervous, but the whole idea behind this exercise is to help you overcome your fear and improve your oral communicational skills. We are here to help you with issues related to your project, which you may not see yourself, no matter how hard you work. This is not a contest, but rather the first step toward getting you ready for your final presentation.

Here are some general rules of thumb, which you should incorporate in your presentation. Incidentally, a major part of your time at your first few jobs (on average for your generation you should expect to change at least six jobs) is to spend on these seemingly trivial presentations over and over again. People in industry are obsessed about these presentations particularly. Your presentation must include in a glossary format the following slides or transparencies. In the following we use the word slide as an example, you can have transparency for your actual presentation.

Do not forget to talk about lessons learned as applicable in each entry below.

- (1) Title of the Project, names of all participants, and the date of presentation, all must appear in the first slide. Clearly, you need to introduce everyone before moving to the next slide.
- (2) Brief Introduction, entails all elements of your talk briefly. Do not use acronyms, unless defined right away. Also, start with something that is a common knowledge (relatively speaking) and build on that. For instance, in this slide you may talk about the following items, but you must go from one topic to another very smoothly. Give an explanation of each entry below.
 - (a) Problem statement.
 - (b) The solution selected, if more than one exists, and why this particular solution is chosen?
 - (c) The selected technical approach (just a name).

Here, you may also use footnote(s) to include your citations, for instance, when you mention the technical approach that you have selected, you need to mention the corresponding source in our standard for citations.

- (3) Technical Approach, entails details of your contributions, and how your team have come up with this approach individually as well as collectively. Here is the place that you state your goals and plans in this project. One, or possibly two slides should include all your pertinent oral presentation of this matter (technical approach), mentioning the following as you deem necessary:
 - (a) Block diagrams of tasks.
 - (b) Personnel assignments and schedules.
 - (c) Finally, the test plan and demonstration as you see now.
- (4) Budget, that entails all aspect of securing resources and funds and using them wisely. For instance, you may talk about resources that you are expecting from your client, if any. Also, in your slide include discussion of the following items.
 - (a) Cost breakdown to date.
 - (b) Anticipated future cost and how it would be secured.

This is the first phase of your oral presentation that you should begin to think about. We improve and revise the above steps, as new topics such as finance, marketing, and ethics are included in our future lecture notes.

Final Thought

As we approach the end of this semester or quarter, we need to collect our thoughts and get as much work done as we possibly can, in order to get to the actual design and testing. Thus, while we are breaking these procedures to you and hoping that you get ready one step at the time for the final presentation of this course, we expect that you do not lose sight of the bigger picture.

Closure

We remind students to consult with some of the students' samples work in Part Three to get ideas for preparing their slides.

Essential thoughts in this lecture

Issues.	Applicability to your project, if any.
Steps to prepare for the oral presentation.	Obvious!
Do you want to add anything else?	Please elaborate.