Strategies for Organizing a Lecture

Lecturing Fundamentals
Lecturing is one of the most common methods used to present class material. It is particularly suited to delivering substantial amounts of factual information, demonstrating processes, and teaching large classes whose size makes broad-based discussion impractical. But lecturing is often criticized as a sure way to bore students or as one-sided or unimaginative. This point of view can be true, but not because lecturing is inherently dull. It may be that the lecturer has failed to account for the needs of the listening audience.

Attention span
One problem is that people have fairly short attention spans; some estimates suggest that students can listen to a speaker for only about seven to ten minutes before their attention starts to wander. Thus, instead of going at full tilt for forty-five minutes, you should divide your lecture into segments which allow a shift of focus regularly enough to recapture student attention. Also, students can only absorb a limited amount of new material in any given class session. If your lecture is jam-packed with new content, most of the information will sail right by your students.

Are you lecturing when students should be doing?
Consider, too, that lecturing is not an effective way to teach critical thinking, analysis, or problem solving; these are skills that students must practice, not simply hear about. If you do need to cover these in a lecture-oriented class, build in active learning elements to get students working, and integrate these smoothly into the format of the lecture. For example, a lecture on mathematical theories can be supplemented with brief problems students must solve in groups by applying those theories.

Incorporate visual aids
Supplement your lecture with visual elements. This approach does not mean you have to construct elaborate PowerPoint presentations or spend a fortune on color slides, although these can certainly make an effective visual impression. Diagrams on chalkboards, clear transparencies with an outline of the topic and main ideas, demonstrations with physical props, and even handouts can be useful. Most people retain information better when they both hear and see it. Stopping to write on the board or to discuss a PowerPoint slide gives students a moment to catch up and these visual points serve as an anchor for developing an outline of important course content. Be certain you employ these visual aids to assist students in understanding new material, rather than cramming more information into one class period. If you distribute copies of your presentation, encourage students to take notes on your packet of information, and
provide space for them to write notes. Asking them to annotate your material helps students to be active rather than passive listeners.

More detailed guidelines for using visual aids are described at the end of this section.

**Decide how to organize**

Decide how you want students to be able to take notes, and arrange your visuals and your organization to facilitate it. You may want to give your students handouts or write outlines on the chalkboard to which students can refer as you proceed. Every lecture should have a clear and distinct structure that student can follow without difficulty.

- **Start with an introduction to the topic, explaining what points will be covered.**
- **Proceed to the main section, including relevant examples to reinforce key points.** Use more than one example to make sure that all students understand a concept. Also ask your students to consider connections between various examples.
- **Wrap up with a distinct conclusion, restating the important themes and information in an informed context.**

As you move from point to point, use clear transitions to keep students oriented within your talk.

**Connection with other lectures**

Make it clear to your students how your lecture is related to previous and future class sessions. The connections may be intuitively obvious to you but not to students. Remind students of underlying principles presented in earlier lectures. Point out that the information learned today will be the foundation for class sessions in weeks to come. The more you can reinforce how daily material fits into the larger structure of your course, the more likely students are to understand and expand on those connections.

**Should I write my lectures or use notes?**

Some instructors write out the whole lecture for word; some only note key points and go on spontaneously. Some reach a compromise, drafting a full lecture and then condensing it into notes or note cards for the actual delivery. Whichever you choose, make sure that it feels comfortable to you and that you are prepared with the material. However, using a complete script rather than an outline may cause you to look more at your notes than your class. It may be more important to rehearse your delivery style than the actual material; practice making frequent eye contact with students, speaking clearly and audibly, and sustaining a pace neither too fast nor too slow. If you are afraid of running out of time, include time guide posts for when you should begin specific segments of your lecture.
What about humor?
Use humor to liven up your delivery. Consider interjecting anecdotes about the topic at hand or pointing out the absurdities or ironies in your subject. Laughter will make students (and you) relax, which can lead to greater interest and attentiveness. By pointing out what is funny about your discipline, you may even inspire students who were initially intimidated by your field to pursue further studies in the subject. Just make sure that our humor is relevant and appropriate and suited to your own style.

Audience response
Lecturing can be one-sided, if the lecturer is unaware of student responses. Build in ways to solicit students’ answers or questions; this approach is a good way to find out how well students are doing with the material and to make any necessary changes to draw them in or to clarify your points. And pay attention to student responses as you speak; their faces and body language will reveal if you are going too fast or if you are confusing or boring them.

Student Notes
If you feel students would benefit from taking notes in class, provide an outline to help them see the overall structure of the lecture. You can provide this outline prior to class, as a class handout, or as something written on the board. Finally repeat more difficult material in an interesting manner to make sure that students both captured this particular information in their notes and understand it.

Students are frequently frustrated when they are required to write notes for the entire class. They are especially upset if the lecturer uses lots of PowerPoint slides without making the slides available online. Students spend the entire class furiously trying to keep up without having time to think about the content and/or to see how ideas are organized and connected.

The Beginning of a Lecture
Lectures have beginnings, middles, and ends. Each of these parts has different goals that you should try to meet.

First of all, try to gain students’ attention and motivate them to learn. PowerPoint can be used very effectively to this end. Use images, music, and/or video clips can be used to draw students’ attention or stimulate discussion. At this stage, the point is simply to bring students into the sphere of your topic.

Secondly, an important goal of the beginning of a lecture is to tell students what they will learn in the day’s session by stating the objectives for the day. Presentation technology allows faculty and TA’s to easily enumerate main points and student
expectations. Students learn by connecting what they know to new concepts, so this is extremely important. There are a variety of different strategies for getting students to stimulate their prior knowledge of a topic before you progress to new material.

Sessions can be started with an opening question posed on a PowerPoint slide. Students can be asked to respond to this question in a variety of ways. Students can write about the question or think quietly. They can do a think-pair-share activity in which students think for a few moments about the question, pair up with a partner to discuss the question briefly, and then come back to share their thoughts with the larger group. This also helps to assess students’ knowledge of the particular topic and might help you shift the focus of the lecture to what students actually need.

The Meat of the Lecture
The mid-point of the lecture is where you present the content. This is also the point in which most faculty go roaring forward. At this point, pause every twelve or fifteen minutes for students to process the information actively. Research has shown that people can’t attend to lectures for longer than about twelve or fifteen minutes. If the lecture is longer, students begin to lose focus and their minds will wander. It’s in these lulls that students should be engaged in some sort of kind of active learning technique.

Many instructors are reluctant to try active learning strategies during a lecture for a variety of reasons. Some don’t think active learning strategies can work in large classes, but this in fact is not the case. Active learning strategies don’t need to be difficult to manage or take a lot of time. They can be one or two-minute activities, done alone or in pairs, that break up a lecture at twelve or fifteen minute intervals. Some of the strategies that we are going to talk about can be adapted very nicely to this particular timeline.

One of the advantages of PowerPoint is that teachers can build active learning strategies into the slideshow as a reminder that it’s time to stop and take a breath at various points during the lecture.

Other strategies to use at midpoint in the lecture include the following: Students can be asked to turn to a neighbor and come up with a question that they feel is difficult. They should try to stomp their partner. Faculty and TA’s can then collect these cards and respond to them in class that day or weave the answers into the next lecture. This strategy gives students a greater investment in the course content and what they produce. And it’s also fun.

You can do a note check during the mid-point of a lecture. Students are asked to a partner and compare notes, focusing specifically on what the most important points of the preceding content are and what they are most confused about.
Wrapping It Up
The end of the lecture is a good time to summarize the information, provide closure, and ask students to connect the information to themselves, their own values, and its application to the world. This can be achieved in a variety of ways.

First of all, students can be asked to write about what the most difficult point of the lecture or their final questions about the material. In this way, students are encouraged to process the material and communicate with you about it.

Finally, ask students to answer two or three very brief questions. This strategy is called a classroom assessment technique. In a sense, what you are doing is asking students if they understood what you consider to be the most important parts of the day’s material. You can collect this either verbally or in writing, and it will help you assess whether or not you’ve met your teaching goals. If not, you can cover some of the material at the start of the next day’s lecture or create assignments that will help students process it. In addition to assessing your students, you’re really demonstrating to them that you genuinely care about their learning and that they are achieving what they set out to by enrolling in your course.