

Greg Newby, INLS 283, Distributed Systems and Administration  
Peer Observation Report  
April 7, 1998  
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We observed Dr. Newby's class on Thursday, 4/2/98, from 6:30 to 9:00 in Manning 307. The general topic for the class was tools for security checking. Dr. Newby presented and demonstrated Tripwire, Satan, crontab, find, and Mozilla. According to the syllabus and related materials on the Web, the goals of this course are to give students hands-on experience in a wide variety of system administration tasks and tools. The assignments and the class demonstrations accomplish these goals well.

Dr. Newby is an accomplished teacher. He is at ease in front of the class; he speaks clearly, uses good eye contact, and has established a good rapport with the class. He is comfortable with the classroom technology. He handled the "business" of the class efficiently, while allowing time for students' questions. There is no required textbook for the class, but Dr. Newby has recommended a couple of books on the syllabus. This evening he asked for feedback from the students concerning what sources they had found most helpful.

The majority of the class time was occupied with demonstrations of various tools and commands. Students are not required to take detailed (i.e., syntax-level) notes, as Dr. Newby makes notes available online. Along with the demonstrations, Dr. Newby talks about when, where, and why one would use the tools, with mention of the types of policies and administrative decisions that should be in place. He covers the commands and demonstrations very efficiently. Some students seem to be working very hard to absorb as much as they can; it might be helpful to pause every so often to allow information to sink in. In general, he handles student questions very well, giving additional details without going too far afield. A couple of times we could not hear the student's question, although the answer was always clear. It might help to rephrase the questions to be sure everyone has heard them, especially when students speak softly.

We want it to be clear that we think that Dr. Newby is doing a fine job reaching many students who have varying levels of knowledge in a very technical area. Having said that, we wonder if the course could be reorganized to make better use of class time. Much of the learning occurs while the students are actually working with the tools and doing the installations. Students share their experiences in the exercises by attaching a brief write-up to the course web page. Watching one or two demonstrations in preparation is probably useful, but there are a number of other class-time activities that might enhance the students' independent learning.

- Presenting a theoretical and practical framework within which the tools can be understood. Dr. Newby does this to some extent, but this could be made more interactive, with discussions based on readings and students' own experiences. Discussion would also help break up the flow of the class a little and help engage the students' attention. Sitting in the dusk watching a demonstration may lead to inattention and a passive attitude on the part of some students. A greater variety of activities during class time might help.

- Presenting and analyzing case studies of computer system set-ups or problems. This would be another way of drawing more students into active participation during class time. It would also help develop analysis and synthesis skills to determine where the problems with the system might lie, and what actions and tools are needed to solve them.
- Doing fewer demonstrations. When there is a “family” of tools, such as the security tools, it might be more useful to present one in some detail, including the analysis of its output, and then discuss the similarities and differences in the others. This would also free up more time for other types of classroom interaction.
- Given the goals of the course, perhaps some time that is currently spent in the classroom should be spent in the lab. This would allow students some supervised hands-on experience, where help is immediately available when they run into a problem. This might be especially useful to those students who do not have a great deal of experience and self-confidence in experimenting.

These are suggestions aimed at making the classroom time more valuable to the students. If the hands-on, technical learning is best done out of the classroom, then the classroom time can be used for activities for which personal interaction is important. Some students were inattentive (e.g., reading newspapers during class), some arrived late or left early. This may indicate that some students don't find the class time very productive.

In summary, Greg Newby is a very capable, engaging teacher who is an asset to the school. He is doing a good job of teaching a highly technical class for the first time. Our suggestions are alternatives for presenting the material that may increase student interaction the next time he teaches this course.