This is a new class this year, developed as the third quarter of mathematical analysis for first year statistics and biostatistics graduate students. It is designed to teach measure theory with mathematical rigor, oriented towards the use made of it in mathematical statistics.

I had four sources of information for evaluating this class:

- the syllabus
- the homework, homework solutions and midterm
- class observation
- informal feedback from Statistics graduate students

The course is well organized, and the topics seem to be just the ones needed for the purpose. The homeworks are challenging and clearly designed with a great deal of thought and care. The solutions provided are helpful, rigorous and carefully crafted.

I observed Tilmann’s class today. There were 22 students in class. Tilmann dealt with $L_p$ space, Minkowski’s inequality, $L_p$ convergence, and the theorem on the Cauchy criterion in $L_p$ (a sequence of functions is Cauchy in $L_p$ iff it converges to an $f \in L_p$).

Today’s class was extremely well organized, and a great deal of material was covered without it appearing rushed. The explanations were clear, even though the material is quite complicated, and the instructor’s writing was clear. The students appeared attentive and engaged throughout, and the general atmosphere in the class combined serious concentration with good humor.

The presentation is the traditional one for mathematics classes: the instructor wrote in chalk on the blackboard, and the students copied down what he wrote. The material was clearly organized into traditional categories: definitions, theorems, proofs, corollaries, and so on. Although old-fashioned, this presentation and organization is effective for this kind of material. The level of interaction with students was not designed to be high, but still there was a fair bit of it: Tilmann asked perhaps three or four questions, and got good responses from the students, who seemed on top of the material. The students asked perhaps six or seven questions, and Tilmann always gave good and helpful answers. One small reservation is that Tilmann continued the class for 5 minutes after it was supposed to end.

I have heard quite a bit of informal feedback from statistics graduate students in the class, directly and indirectly. The general feeling seems to be extremely positive, and students seem to feel that the material is very relevant to their program, and that it is clearly presented. One student commented to me that this is by far the best of the three analysis courses from the point of view of statistics study.

In summary, this class is already a clear success, even in its first year. There is a surprisingly large group of students, and they seem to be benefitting from it greatly. The course is very well organized, and the teaching is very effective. In Tilmann’s hands, it is a great improvement for our graduate program.