

Teaching Statement

Machiel van Frankenhuijsen

I enjoy teaching. The last few semesters, I have mainly taught College Algebra. I enjoy explaining basic mathematical facts and methods. Also, it is clear that my more advanced knowledge of where the course is going (the follow-up course is Calculus) gives me the possibility to teach my students the right way of looking at the several concepts that they learn, one that will allow them to progress in the next course as well.

I had one student who was only partially prepared in the beginning (he had not finished high-school, had not seen any mathematics for a while, and had had to retake each math class at our college before he passed it). But he was very motivated and worked hard. I saw him regularly in my office hour, and I could see that he was making tremendous progress. Eventually he passed with an A-. This is all the more impressive since in my teaching evaluations, some students say that my tests are hard. However, the example of this student shows that my exams really test if the students master the material, at the right level for those students who have mastered it. I have had several students who made such tremendous progress.

I have taught a variety of courses besides College Algebra and Calculus, such as Number Theory in 2004 and a seminar at Rutgers University. In Fall 2007, I will teach Cryptology. I taught this course at Rutgers for liberal arts students. This time, the course will contain more of the number theoretical background. I have been a high-school teacher in 1996, and this experience will help me when I teach a course for elementary school teachers in 2008.

One thing that always happens is that I see some student regularly outside of a formal course setting. The student has questions about mathematics, and I tell them what I know, about number theory, or analysis, or any other subject that the student is interested in and where I happen to know something interesting. I also listen to the student giving informal presentations, and encourage them to give a talk for the department and write up their findings. I have a couple of such students at UVSC, and I had a few such students at Rutgers, who were preparing to go to grad school. I always enjoy such interactions, which start out by chance.

In summary, in my formal teaching I am demanding but make sure that my exams are at the right level. I am always available for my students (I tell my students that they are always welcome, in or outside my office hours, and spend a lot of time with them, for example when they are studying for an exam). In my informal teaching, I enjoy talking with students about mathematics and about the questions that occupy them.