TEACHING STATEMENT

EDUARDO MORA

The teaching-learning process is complex and depends on many factors, such as the relation instructor-students, the instructor’s teaching style and, of course, the level of understanding and commitment of the students. In order to know the students’s interests and to have an idea of their background and familiarity with the subject the first day of the course I usually ask them to answer a survey and to take an evaluation test. This will help me to have a good rapport with them and allow me to know their weaknesses and strengths.

Though my research interests are in pure mathematics, when teaching I incorporate applications and ideas from other sciences such as Physics, Fluid Dynamics, Economics and Biology. In my lessons I present mathematics as a unified field of ideas rather than a disconnected group of concepts and techniques. To better communicate concepts and ideas I explain them verbally and graphically by making effective transitions between topics which is very helpful in distinguishing important results and concepts. In addition drawing pictures and diagrams serves to save a lot of words. The effective use of the board is fundamental, so I write clearly and in an organized manner in order to allow the students to take notes and follow the lecture.

Participation in class is important, I encourage the students to ask and to answer questions. In order to not be intimidating when asking, I do it gently and applaud partial answers. I encourage the students to work in teams and to occasionally come to the board to present their own ideas.

Mathematics have to be taught at an appropriate level: solving problems with the adequate level of challenge is the best way to learn. Choosing an appropriate approach is fundamental to enrich the teaching-learning process. For non-math majors and elementary courses, I prefer a down-to-earth approach, focused on worked examples and applications, rather than the technical oriented approach that fits better for math majors and advanced courses.

Exams are necessary and an integral part of the process, the students are going to be continuously evaluated during their careers, so they have to learn how to succeed on evaluations. I spend a lot of time preparing exams with just the adequate amount of work.

My teaching experience includes various college courses (Algebra, Precalculus, Calculus, Real and Complex Analysis), for both math and non-math majors, in several universities within the USA and Mexico: NYU’s College of Arts and Science and DeVry Institute of Technology in New York City and The National Autonomous University of Mexico and Moterrey institute of Technology in Mexico City. I enjoy teaching and I am sure that my skills and previous experience in teaching would be an excellent fit with the goals and teaching strategies of your institution.