Teaching statement Etienne Grossmann

I taught an undergraduate course in discrete mathematics, enjoyed it very much and would like to continue teaching. In my class, I emphasized the importance of using correct mathematical notation to sustain scientific reasoning. I made clear to students that our aim was not only to build their mathematical *knowledge*, but also to develop their *skill* in the mathematical language. They practiced during recitations and in regular homeworks.

I used feedback from students and teaching assistants a lot, when preparing classes and exercise. For special needs, I wrote extra "helper documents," which are visible at `http://www.cs.uky.edu/~etienne/cs275/helpers.html`. Since students are not all alike, I presented important items from many viewpoints, to better reach everyone. I shared studying practices that, in my own experience, had been successful. Some students were receptive to the idea that one can learn while having fun, e.g. with puzzles or popularization books. I often used their prior knowledge of programming languages in my exposition of logic and of mathematical notation. In general, I found that encouraging students to be self-confident and being responsive to their demands were very effective.

My classes are designed to fit the audience and relate with their curriculum. For both undergraduate and graduate teaching, I place my action in continuity with the past history and future perspectives of the students.

I also supervised graduate students in their projects, gave graduate lectures on Adaboost and helped to design a programming assignment on spam filtering, an every-day utility.

I believe research and training can go coupled, for the greater benefit of both. For example, programming projects could result in useful research tools. If funding is available, it could be used to reward students with short-term paid programming projects. Also, I have participated in many free software projects, which I see, amongst other things, as a mean for talented programmers to get recognition for their skills.

In summary, I have some experience in undergraduate and graduate teaching and propose to use innovative methods to increase the effectiveness of my teaching.