

Teaching statement

I am currently ending my PhD as an Assistant Professor (ATER) at the Laboratoire de Mathématiques Nicolas Oresme of the Université de Caen-Normandie. During my contract as PhD student I was in charge of teaching to undergraduate student for 64 hours a year and it was also mandatory for me to validate my internship as Professeur Agrégé (upper-grade secondary teacher). This year as an ATER I had to teach 192 hours.

My teaching covered many subjects as basis of mathematics (naive set theory, Riemann integrals, discrete and continuous probabilities) (63 hours), Logic (25 hours), Algorithmics & Formal Computation (150 hours of tutorial classes, 78 hours of practical classes on Python and C) and Analysis (66 hours of tutorial classes, 8 hours of lecture) to a wide range of students : Biology, Computer Science and Mathematics students for University student as well as students of the Institute of Technology from first to third-year.

These various teaching situations, as well as the training program for university teachers, the preparation to teaching examinations I attended in Master Degree helped me reflect on my pedagogy, the best way to teach students and in fact, that these question is not really unique and that an important part of the teacher duties is to find many ways to explain the same informations in order to ensure that any students gets it in the end.

I keep permanent contacts with colleagues from primary and secondary school to keep on touch with their practice and to try to maintain a continuation as smooth as possible along all the different stages of education. I commit myself to inclusivity, making my best for all students to follow the class, encouraging them to work together (the weakest one having then an easier space to ask their comrades their questions, and the strongest being able to assert themselves they have weel understood, while explaining it to others).

I am also trying my best to alleviate the barriers the students get : disabilities, shyness, demotivation, disadvantaged social or cultural context, gender prejudices but with the belief that through teamwork, serious dedication, self-confidence and positive (yet honest) reviews from their teacher the students will be able to reach their goals, without ever giving to demagoguery and lowering my expectations.

I have the same high expectation for my students, as for myself. That is why, during my PhD I set up some colleagues visits where Phd Students attends some of other PhD Students' classes to see other practices and after discussing about it and reflecting on the motivations and expected outcomes of a particular method compared to others. I regularly asked my students to fill anonymously some enquiries about the organisation and the reception of my teachings.

I am also eager to strengthen my experience while experimenting new cultural contexts by teaching in other institutions, other countries and other fields.

The sanitary crisis of Covid-19 has been a big challenge, especially as I did not teach in spring 2020. I had to get used to online tools by the summer of 2020 and, as my goal this year was to get better on managing and stimulating oral interaction during my classes, I had to adapt on a very different paradigm in less than a week. After one semester of online teach I think that I managed to get back to roughly the same level of interaction (for instance with short quizzes to student asking if they are still following me, many invitations to ask questions and so on) as in class but I can surely still get better and that will stay one of my priority, to free the speech, especially in the French cultural context where students tend to stay quite passive and quiet during the lessons.

I have some experience with popularization of science as I took part in Math.En.Jeans workshop where I introduced some research subjects to High-School students and following them in their researches. I also attended some Fête de la Science (yearly french science popularization week-end). I also took some interest in non-formal education, passing the french certification for volunteer animation (BAFA) in which I can also draw some ideas to enrich my teaching.