

# TEACHING STATEMENT

*Jing Wang*

I enjoy teaching mathematics tremendously and am committed to striving for excellence in all my teaching endeavors. My teaching experience can be traced back to when I served as a private tutor for mathematics during my undergraduate study, but my in-classroom teaching experience started when I was a teaching assistant at the Dalian University of Technology in China. My teaching skills were further polished during my four years of teaching service in the School of Mathematics of the University of Minnesota.

When I was a teaching assistant for the course *Mathematical Analysis* at the Dalian University of Technology, I was about the same age as the students. So rather than looking like a teacher, most of the time, I was just like one of them. The students enjoyed my recitation class so much that they asked me to teach recitation classes for another course *Advanced Algebra* for a few times. I have to say that while helping the students solving the problems, I myself also learned a lot. And I realized that being a teacher, I was actually given a second chance to learn the course again, but in a much more thorough way.

From fall 1998 to summer 2002, I served as a teaching assistant for the School of Mathematics. The courses I taught cover *Calculus I & II*, *Multivariable Calculus*, *Linear Algebra*, *Differential Equations*, *College Algebra and Probability*. My duties as a TA were to teach four recitation classes, give quizzes and hold office hours every week. During the summer of 1999, I was assigned as a lecturer for *Calculus II* in which I took care of all aspects of the class.

From the very beginning of my teaching, I believed that good planning leads to good teaching. As a teacher, you must have a clear understanding of the topics you are teaching; you must have a clear idea on how to deliver the topics to the students. Only when you know the topic well, will you be able to explain it to students well. While I was teaching, besides preparing for the class carefully, I also tried to be well organized in class, both in verbal communication and in blackboard writing, this would certainly help the students to understand the material. My well-organized teaching style enabled me to be assigned in-class recitation duty right after I was admitted in the department, which was earlier than it normally would be for international students at the department, that was a great encouragement.

As both a student and a teacher, I clearly understood that the teacher should be accessible to all students. No matter when I was holding recitation classes or when I was teaching, I constantly reminded myself that the students are at different levels, so it is very important to make sure everyone follows the classes. This means, sometimes, I had to explain the same concept or problem several times. I frequently told the students not be afraid of ask questions whenever they had one and once a while during my teaching, I stopped to ask for questions as I understood that not every student was bold enough to call them out. Besides holding regular office hours, I also allowed students to make individual appointments, this ensured that they could seek for help whenever they needed it. Frequently, I received appreciative comments from my students about my teaching as well as my accessibility.

I also think a good teacher should always look for ways to improve teaching skills. While teaching itself was certainly improving my skills, I paid great attention any suggestions either given by students or obtained from the semi-annual teaching evaluation conducted usually

by senior professors in the School of Mathematics. Right after I received the suggestions, I would thought about the issues carefully and tried to practice ways to improve them in the upcoming teachings. Once a while, I observed some of my fellow graduate students' classes in hopes of assimilating some of their successful teaching skills into my classes. All of which had helped polish my teaching skills gradually.

In 2001, I was honored to be awarded the **“Citation for Excellence in Teaching”** by the School of Mathematics of the University of Minnesota, an award given annually to about six teaching assistants out of over one hundred teaching assistants.

Looking forward, I would be interested in teaching any undergraduate math courses, from introductory courses in calculus, probability, linear algebra up though advanced undergraduate courses in analysis, differential equations and numerical analysis. I would also enjoy teaching graduate courses in applied mathematics, numerical analysis and scientific computing. Given my extensive experience of using Mathamatica, Maple and Matlab etc., I will be eager to integrate these computer learning components into the teaching whenever possible, as these tools have become indispensable for both academic research and industrial applications.