

Teaching Statement

Teaching is one of my passions. After many years of teaching, I can honestly say that my professional experiences have been exciting, satisfying, and highly rewarding. I believe my teaching skills and my background in mathematics qualify me to teach a wide variety of courses. My teaching format is interactive; although throughout my teaching career, I have experimented with other styles.

As a teacher my main objectives whenever I teach any course are as follows: (1) Ensure that the students learn the fundamental content of the course. (2) Develop critical thinking skills. (3) Develop group skills and cooperation. (4) Develop individual skills and encourage independence of thought.

My experience in teaching has been quite extensive. Upon the completion of my bachelor degree in 1987, I worked as a high school teacher for two years. I taught courses in algebra, differential calculus, integral calculus, probability and statistics. Furthermore my teaching experience was enhanced while working on my Master thesis as a research/teaching assistant at King Fahd University of Petroleum and Minerals (KFUPM).

From 1991-1998, I was employed as a full time lecturer by KFUPM to teach basic mathematics courses. I taught algebra and trigonometry, pre-calculus, calculus, and calculus for business and social sciences. My duties as a lecturer included: preparing and delivering the lecture, assigning homework, and any additional work sheets, holding regular office hours and tutoring sessions, writing exams and quizzes, and finally assigning the course grade.

In addition to my teaching load, I served as a coordinator for preparatory mathematics I, for one year, as an assistant to the coordinator for preparatory mathematics I & II for two years, and as a reviewer of common and final exams for three semesters. This type of work enabled me to experience a new element of teaching while coordinating courses with multiple sections. During my seven years at KFUPM, I also served as a recitation instructor for two semesters to fulfill a part of my teaching obligations. In the recitation class, I presented a short lecture summarizing the material covered in the main lecture that was given by a senior faculty member. Responses to students questions were answered at the conclusion of the lecture. Besides my teaching responsibilities at KFUPM, I served as an active member in many of the departmental committees.

From June 1998-June 2002, I was a graduate/teaching assistant at Kent State University in Kent, Ohio. My teaching duties include teaching courses in the Mathematics and Computer Science department. During those four years, I taught courses in college algebra, pre-calculus and statistics, and I tutored the majority of the undergraduate courses offered in mathematics and statistics.

From June 2002-August 2003, I worked as a research assistant with my advisor Professor Reichel. During his absence (due to travel), I was asked to teach his graduate courses in numerical analysis. It was truly an honor and a rewarding experience to be given the opportunity to fill in for one of the experts in the research and teaching fields associated with numerical analysis. Also, sometimes I used to cover the statistics classes (undergraduate or graduate) for a friend of mine whenever she is out of town.

Since September 1, 2003 I have been hired as a visiting assistant professor at DePaul University to teach mathematics classes. Last quarter (autumn quarter) I taught three classes, two of them are Business statistics and the third one is Business calculus. In this quarter (winter quarter) I am teaching the same three courses. In the Business statistics

course I covered descriptive statistics, basic probability, the binomial distribution, the normal distribution, sampling distributions, confidence intervals, hypothesis testing and linear regression. Besides the traditional lecture, I encouraged students to use statistical software packages such as EXCEL, and MINITAB to solve most of statistical problems, because of their availability and ease to use. In the Business calculus course I covered functions, limits and continuity, derivatives, marginal analysis in business and economics, optimization, derivatives of logarithmic and exponential functions, and finally implicit differentiation. I really enjoy teaching such topics to liberal arts or business students.

I am excited about the benefits of integrating technology in the classroom. The internet can be a fantastic resource for information and web pages can be used to organize the class. I have used the course web page to provide not only general course information, but sample exams, answer key and even additional practice problems. In the teaching of collage algebra, calculus, business calculus and statistics, I have used a graphing calculator (*TI-83 Plus* with programming capabilities) to solve and simplify most of the problems. Also in some of my lectures, I used power point presentation especially when I want to explain some of the material using figures and tables.

My teaching skills and extensive background in pure and applied mathematics qualifies me to teach a wide variety of courses. I enjoy teaching all mathematics courses offered to undergraduate students. Also I like to teach courses in numerical analysis, and scientific computing. Furthermore, I enjoy teaching statistics. Statistics happens to be one of my favorite courses that I have taken at Kent State University.

Effective teaching not only involves being passionate about a subject, but being able to convey it to students in such a way that they understand it. Teaching goes beyond working with students in the classroom, it is important to be available outside of class. For this reason, in addition to regular office hours, I make myself available by appointment so that any student needing help can get it. I feel that the best way to learn mathematics is through solving many problems of the appropriate level. Therefore, I give my students extra problems related to the material we have covered in the lectures and held problem sessions outside of class time, so that students can discuss problems they have been working on. In my years of teaching, I have always made every effort to create an atmosphere in my classrooms that is as warm as its scholarly. I believe a teacher should help students feel comfortable enough to express their ideas in class, and make it possible for them to learn from each other.

Teaching is a dynamic profession. I find it important to remain active by participating in seminars and conferences by maintaining an active research agenda, and developing consulting relationships both within and outside of the academic community. This will equip instructors with new tools and skills that can be utilized in the classroom. My experiences as a doctoral student have taught me to be patient with students, and to devote as much time as possible in helping them to understand the material. Likewise the exams should be prepared in a way that enables students to experience a certain comfort level when preparing for an examination. Finally I value the active involvement of colleagues and students in the learning process. This would enable instructors to use feedback from his colleagues and responses from students classroom instructions and those submitted during course evaluations to enhance teaching skills.