

Shane Tang's Teaching Philosophy

My philosophy of education is that every student is capable of learning mathematics if there are thorough and clear instructions in an effective learning environment and that he/she is determined to spend time and effort to learn. Although some students may not be interested at the beginning, I hope that students will develop a love of the subject as I have. Mathematics is a subject that always provides an absolute answer regarding right or wrong. I strive to motivate all students to learn mathematics because it will help them handle quantitative matters in life and acquire logical and deductive reasoning skills.

In order to provide sound instruction, good preparation is a must. In addition to reviewing old information, a portion of every lecture should be spent on answering students' questions. Learning math is like climbing a ladder. Before we move on to the next step, we must stand on a firm place or have a solid understanding of the previous materials. While presenting definitions, theories, and examples of each topic, I often discuss related history, proofs, graphic models, and real life examples to students to help them to learn beyond the required curriculum. After presenting the lecture, I encourage students to do some problems in class so that I can give them immediate feedback.

During my teaching career, I found that students are more eager to learn if I am sensitive to their needs. A personal interview in an informal setting encourages students to relate their learning difficulties to the instructor. No reference should be made to any individual living style, race, cultural background, and gender except to praise the positive qualities of the individual's learning ability so as to help him/her to learn. An informal interview is also a time for me to receive feedback on my teaching style from students so that I can improve. The teacher's sensitivity to students' needs should by no means affect the integrity of the grading system.

When I was a math tutor for two years, I found that different students learn the same topic differently. I applied what I learned and found that presenting materials in a variety of ways helped students of different learning styles grasp the materials. Calculators and computers are also good resources in helping students' learn. We live in a technologically driven society. Since machines do not have the ability to think, a sound understanding of mathematical theories is important before students can use calculators to find solutions effectively and correctly. Textbooks with computer software also create a wonderful learning experience for students.

As a math instructor, my goal is to provide every student all reasonable assistance so that he/she not only will learn mathematics but will continue to use logical and deductive reasoning in their lives. After students finish with my class, I hope that they will be able to handle the quantitative portion of their lives with confidence. In addition, I hope that students will use the reasoning skills to improve their lives and to contribute to our community.