

## **Teaching Statement - Marc Andrew Choi**

I continuously hear some variation of “I hate math, I’m just not a math person” for as long as I can remember. I believe this is one of the most harmful lies we accept and aim to challenge the notion of the existence of a “math gene.” Everyone has the ability to think like a mathematician, working through a problem with a set number of tools and using problem-solving techniques and creativity to create a solution. This mathematical intuition is not only present in school but is necessary in the working world. I was fortunate to have numerous teachers and mentors provide direct guidance on my studies. Seeing the invaluable impact it had on my academics, I aim to transform the way we teach mathematics to make it more digestible and accessible for everyone by making it more collaborative and less about grades.

The foundations of mathematics (such as college algebra, calculus and statistics) should be taught using basic principles and examples that people can use on a regular basis. By solving more practical problems, mathematical formulas are easier to commit to memory, developing problem solving skills and mathematical intuition. With this basis, more rigorous and theoretical concepts are easier to grasp and mathematics becomes a collection of tricks to help solve problems rather than solving random equations. While everyone will not have the desire to become a mathematician, math is extremely applicable to various fields, creating more well rounded individuals.

Students are almost always focused on the grades that it detracts from their overall understanding of the subject. I have also been at fault for having this mentality but numerous professors have put the emphasis more on learning and less on the grades. Consequently, I will have easier but more frequent assessments and homeworks with an emphasis on collaboration. In industry and research, rarely are individuals working on their own and I believe our curriculum should reflect this. Through this teaching style, I hope to foster a more inclusive learning environment where students are less anxious to make mistakes.

I currently tutor high school students throughout the country in Geometry, Algebra, Pre-calculus, AP Calculus AB/BC and AP Statistics. In my tutoring sessions, I realize that breaking down problems into step by step procedures and clearly defining what the problem is asking clarifies most of the students’ misunderstanding with the subject. Additionally, I mentor ten first and second year undergraduate mathematics students where I work with them one on one to prepare them academically and professionally. Finally, I help new initiates of UCLA’s Chapter of Delta Sigma Pi Business Fraternity in managing their coursework to maximize their GPA before recruiting for their respective industries.

In the future, I hope to be a teaching assistant and instructor of various mathematics courses at the university level. Additionally, I will have mentorship opportunities, such as directed reading programs, for those who are serious about their studies, providing students an opportunity to engage with mathematics in a stress-free environment where the focus is solely on learning and not marks. Education does not stop in the classroom but is a lifelong pursuit of knowledge.