

# Teaching Statement

Mario Giacomazzo  
Arizona State University, Tempe, AZ

## Modern

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The rapid advancement of technology has aided in the development of statistics. Although the theory found in introductory statistics has remained static, the practice of that theory has evolved. Today, traditional approaches to statistic education need to be drastically altered. The use of statistical software i.e. JMP, SPSS, R allows students to immediately apply basic statistics in academia and the workforce. Also, the gains in efficiency allow me to focus on helping students understand the key concepts required to see the beauty behind the math.

## Applicable

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Students often consider statistics as a math class. This biased thinking can lead to premonitions resulting in future discouragement, especially for students who struggle with math. Not every student loves statistics, but every student loves some field that requires statistics. When I prepare for class, I target my examples to the interest of the students. How can we use a sample to make inference about a population? The context of the proposed question can be biology, sociology, psychology, engineering, education, etc. I believe the applicability of statistics across research areas can fuel the student's desire to learn more.

## Relational

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Part of the educator's role is to foster an environment where social interaction is encouraged. My passion for education emerged from the many relationships I had with past professors and teachers. A dynamic learning environment builds off the comfortability students have with each other and their professor. Student interaction on homework and in class is encouraged. The harder I see a student work, the more I will go out of my way to help them individually. Weekly office hours give me time to develop close relationships that lead to future recommendations. A few times each semester, I intentionally seek out opportunities to support students involved in extracurricular activities.

## Involved

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The only bad questions are the questions never asked. I constantly try to discourage silence in the classroom. Student involvement is contagious. Positive feedback and praise for attempts demonstrate that failure is an essential part of learning. The role of the statistician is not to "do" statistics but "interpret." At its core, statistics is formulaic and procedural. Students need the additional ability to explain the results. To that end, I use students to help other students. Every class, I come prepared to lecture and prepared to divert from that lecture. At any moment, I am willing to amend my plans to engage the class using an idea or approach expressed by a student.

## Open

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Full transparency is important. As the price of education increases, my responsibility as an educator increases. I am not a dictator; I am a facilitator. The first day of class is my opportunity to present my expectations along with my plan to help them reach those expectations. After every exam, I provide the full grade distribution for the students. Every decision regarding their grades is documented and presented to the entire class. Indirectly, I work for the students; therefore, honesty and integrity are essential for earning respect.