



Saint Martin's  
UNIVERSITY

September 25, 2014

Re: Picone, Dr. Rico

To Whom it May Concern:

This letter is to report on my classroom visit to Dr. Picone's Instrumentation and Experimental Design (ME315) lecture on September 19<sup>th</sup>, 2014. This classroom visit is part of Dr. Picone's first semester process, and I was there in my role as his faculty mentor. ME315 is a required course and taken by senior-level engineering students. There were about 30 students in the class that day.

My observations noted that the students spanned from highly engaged to somewhat surly seniors. Dr. Picone entered the class a few minutes early and engaged the students in friendly conversation. I could tell that he was comfortable and did a good job of setting a familiar/friendly atmosphere. In general, throughout the class Dr. Picone maintained a relaxed and confident demeanor without seeming arrogant or aloof. I noticed that the students were not afraid to ask questions or answer them (even if incorrect). The students with stronger personalities and a tendency to make distracting comments he engaged directly and then moved on with the topic at hand.

Dr. Picone began class by discussing and reviewing a tricky topic that was a part of the student's homework. He had taught a section of the same class that morning and he used his experience from that class to adjust the focus of his afternoon class. He did not hand them the answer but set them up to search for the answer in the text (Z-scores). He followed this up with a demonstration of the concept using a probability chart as a visual aid.

The students were supplied with a skeleton of notes, which he built upon during the class. I was impressed to note that he did not rely upon premade notes, but hand wrote the concepts and calculations in class. This was done with the use of the SmartBoard pen and Illustrator program, which allowed him to change colors on the go and kept his pace steady. It also allowed him to save the day's notes and post them on Moodle if needed.

For a particularly tricky concept (covariance), Dr. Picone stepped the class through a simple example to build the scaffolding for success with more complex scenarios, which he warned would show up on the exam. Routinely during class he would ask questions to assess the student understanding before moving forward with the lecture. After asking the question he would allow the students time to think before selecting an answer to come forward. He took answers by calling on students by name. Similarly he would pause in the middle of writing an equation to ask the students to identify what component was supposed to come next or what the units for the answer should be: "When is this relevant?" "What should come next?" "What variable is this?" "How would the answer change if X changed?" He then

spent extra time re-defining covariance and establishing the importance (relevance) of calculating it in practical engineering terms. I found these techniques to be effective ways at maintaining classroom attention and encouraging critical thinking.

At the end of class he left time for questions and to run through a quick review of the topics covered that day. He also announced his availability between classes if students encountered questions later.

With some strong and potentially distracting personalities in the classroom, Dr Picone may consider establishing some classroom management strategies or, if the situation was difficult to manage, he could speak to individuals outside of the classroom to help establish his expectations. This is always a delicate balance. Also, working through math equations during class requires devoting much of your attention to the "paper" in front of you, and on one occasion a questioning hand was raised by a student, but not noticed. Taking more frequent opportunities to pause or look for questions may be helpful.

Overall, I believe Dr Picone delivered a very effective lecture on a topic that was heavily math based and connected to complex ideas. It was a pleasure to sit in on his class and inspired me to investigate the use of an electronic pen with an illustrator program for my lecture notes.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Aaron Coby', with a long horizontal line extending to the right.

Aaron Coby  
Associate Professor, Biology  
Associate Dean, College of Arts & Sciences  
Saint Martin's University