

## Willing to Learn, Grow, and Adapt

My name is Oscar Macedo from El Paso Community College in El Paso Texas. I am looking forward to attending this workshop to learn something completely new to me, teaching computation using MATLAB. This is the perfect opportunity for me to grow as an educator, and to better adapt to my students' academic needs. Most of my courses consist of students with a major in engineering. Since we are a two-year institution, our students transfer to the University of Texas at El Paso to complete their bachelor's degree. When I was a student at the university, I too was an engineering student. From day one, in my first engineering course, I was expected to know at least the basics of MATLAB. Unfortunately, prior to entering the university, I had no experience with MATLAB. I had done programming with C++, but I did not even know that MATLAB existed. To date, some of my students run into a similar situation. They are expected to know the basics of MATLAB, but most of them either have little or no exposure to the language. Incorporating MATLAB to my courses could help with this situation. My students usually take my Math courses (Pre-Calculus sequence) before they take any engineering course. That early introduction to MATLAB in my courses, will better help prepare my students for their engineering course work. Personally, I think I would have done better in my first engineering class if I had prior experience with MATLAB. Unfortunately, that did not happen for me and I have the perfect opportunity to make a change for my students. As an added benefit, I believe students can improve their learning in my course from this experience. Back when I did basic programming, I remember that structuring algorithms where a key component. In my opinion, structuring an algorithm is needed to solve problems. Not only will the early exposure benefit my students in their engineering carriers, but it will also benefit them in any problem-solving situation. Having a course where students could merge the ideas of programming with problem solving, will greatly enhance their overall experience in the course.