"Good teaching cannot be reduced to technique; good teaching comes from the identity and integrity of the teacher." - Parker Palmer, The Courage to Teach

Statement of Teaching Philosophy

When I read Parker Palmer's quotation, it made me wonder, what does it take to be a good teacher? Thinking from a student perspective, my favorite teachers had something in common: they were passionate about their responsibility to transfer knowledge and about the subject they were teaching. Beyond methods, teachers' identity is what makes a learning experience unique and inspirational. My teaching philosophy is centered on an integrated learning environment that includes the students, the subject, and I. I intend to transmit to students my passion for keeping on learning every day, and I strive to provide adequate pedagogical methods that fit every need.

I focus my teaching goals on developing critical thinking, engineering intuition, and research connections. Introducing students to critical thinking involves the acquisition of different skills such as analyzing, reasoning, evaluation, decision making, and problem-solving. All these skills will be crucial to their adequate professional growth. In addition, the development of engineering intuition is fundamental for a complete understanding of the theory and its application to physical systems. Also, I prioritize the research connection of the subjects. As a researcher, I want my students to keep asking more and more about the current and future problems and to be open question current theories and indagate by themselves.

In order to accomplish my teaching goals, my lessons include a presentation of the theoretical part of the subject, followed by examples of applications, and an open section for discussion of the material and questions. I encourage the participation and the active involvement with a continuous assessment, providing questions through the lesson. I try to use real-life problem to allow them to relate the theory to the practice and foster the research intrigue. For example, in my Highway Geometric Design course, we studied about the design of horizontal curves, through the lesson I asked them to locate horizontal curves near campus and to assess whether the curves were appropriate to trucks, buses, and personal vehicles. Students developed a deeper understanding of the application of the horizontal curves design techniques and also an engineering intuition for the diverse types of curves depending on the type of vehicles.

The assessment of the knowledge is a crucial part of the learning process. Thus, I try to evaluate my students' understanding continuously. This assessment includes questions during the lesson, quizzes, exams, and homework. The continuous assessment allows me to measure the level of knowledge gain and the pace of the lessons. When students face difficulties, I try to expand explanation by extending the time dedicated to the topic, providing additional academic material, and encouraging them to attend office hours.

I intend to provide an inclusive environment and treat my student equal. I look forward to offering my students with knowledge, inspiration, and passion about the subjects and learning experience. My primary goal is for them to be as passionate for engineering as I am, and I will try my best to become a role model and a thoughtful guide through their learning process.