

### **Vision Teaching Statement**

I have a unique opportunity to shape future dignified global leaders in science and engineering as an instructor. I promote an "active" learning culture by encouraging students to confidently ask and answer questions so as to: (i) learn how knowledge is created, (ii) explore individual intellectual prowess in problem solving, (iii) produce products such as accurate technical reports, computer aided design drawings, manual or digital maps, in formats suitable for solving real life challenges, and (iv) push the boundaries of knowledge, and remain at the forefront of cutting edge science, technology, and innovation. I believe this is the best pedagogical approach, because to be a successful professional not only requires honesty, openness and empathy but also innovative approaches to daily challenges. Thus, my daily focus is to actualize this vision incrementally among my students together with imparting the necessary technical knowledge and practical skills. My students are fully aware of the high professional standards in survey engineering because I frequently show the interconnection between their education, and future responsibilities in society.

I create a conducive academic environment and continuously motivate my students' interest and excitement on survey engineering. By exposing students to "real world" practical challenges, I not only infuse a positive attitude, but also enhance student interest and appreciation for tackling complex engineering challenges head-on. Academic assignments are structured to ignite passion, appreciation of the subject, and the "learn by doing" motto. Importantly, I create a mindset in students of focusing and completing specific tasks with perfection. I strive to make students active participants in their own education by facilitating discussions and interactions on the topic of the day. To encourage discussion, I am always available to students, and openly invite students to discuss with me any problems they are having that impact on their success, even after official hours by appointment.

Because I am aware that students learn in a various ways, I utilize diverse pedagogical approaches. My lectures simplify complex mathematics using "first principles" so that students grasp the technique and are comfortable with equations without memorizing. Besides, I encourage students to explore personalized methods to boost their understanding of the mathematical or logical concepts. Each topic has a theoretical and practical component, whereby students work in small teams on class assignments and field projects. Further, my students are trained to be conversant with "state of the art" technical survey equipment, data analysis, and mapping. I actively participate in departmental and college meetings especially on missions such as: (i) creating a future research vision, (ii) building new courses or (iii) increasing student numbers. I see an enormous opportunity of beginning a fully-fledged geomatics curriculum focused on producing future leaders, "think-tanks", and innovators specialized in solving the daunting challenges threatening the survival of humanity, environmental monitoring, infrastructure development, digital agriculture technology, space technology research and contribute to the technological advancement of the engineering survey profession globally. Finally, I take sincere interest in the wellbeing of everybody (students, colleagues, staff, and society). To this end, I interact with all people in a respectful and professional manner.