

Statement of Teaching Interests

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“Education is not the learning of facts, but the training of minds to think.”
—Albert Einstein.

1 Teaching Experience

My interest in teaching and education has started during my postgraduate studies, and my pedagogical experience has evolved over time as I gained more experience from each teaching duty I had. My first teaching experience was as a Teaching Assistant at University of Benghazi during which I was fortunate to practice teaching and learn the best teaching practice of well qualified professors. At that time, I was responsible for leading tutorials, marking assignments, and help the students in their projects. As I enjoy teaching and its associated activities, I used to provide an extensive feedback on the student work within a tight timeline. After three years of being a TA, and based on the based on the positive recommendations of both professors and students I secured a position as a Lecture Assistance (instructor) at the Electrical and electronic engineering department once I finished my MSc. study.

I continued to teach at University of Benghazi from July 2008 to December 2012 where I left the university to pursue my PhD in Canada after a secured a prestigious scholarship based on the University recommendation form the Libyan Ministry of higher recommendation.

In July, 2008, after I finished MSc. study, I secured a position as a Lecture at the Electrical and electronic engineering department, University of Benghazi, where I continued to teach for more that four years until left the department and come to Canada to pursue my PhD.

During my four years tuner at University of Benghazi I used to teach two courses every semester. These courses include Telecommunication Theory I & II; Electromagnetics I & II; Microwaves; and Antenna & Propagation; C++, and Matlab.

In the beginning of this role, I focused on explaining main concepts and ideas of the subject and on solving various problems to the students clearly in a simplified manner which thought I this is all an instructor need to do in a class. Later, after the first semester, I realized it is necessary but not sufficient to make the students fully understand the subject. It realized it is important to develop the students critical thinking capabilities and problem-solving techniques and to reduce the mathematical anxiety, especially to the undergraduate students, rather than focusing on solving numerical problems. To achieve this target, I involved the students in the learning process by asking them questions and encourage them to ask questions, by giving more practical and technical examples from the real world, and more importantly by unifying the seemingly disparate concepts. In particular, I recognized that many concepts that are repeated in several modules may initially appear to be disparate ideas.

After I joined Carlton university as PhD. student, I used to be a teaching assistance for several courses including Digital Signal Processing, Digital Communication Theory, Wireless Communications, Operations Research (Optimization), Computer Systems Architecture, Communications Systems Lab, Electronics II, and Computer Networks. I realized that teaching in a multicultural Canadian University is a complex and multifaceted task that includes face-to-face teaching, curriculum design, use of digital technology, and designing engaging tutorial. I recognize the importance of creating an inclusive learning environment where all students feel valued, respected, and empowered to succeed.

At Carleton University, both as PhD. student and later as Postdoctoral Fellow, I also mentored undergrad and post grad students during their course projects, graduation projects, research papers, and master thesis'. Based on this experience, my view on learning and teaching practice has evolved

and now I view students as partners that have to be actively engaged in the teaching and learning activities to better understand the global context of their studies and be prepared to the job market. Currently, after my my industrial experience, I have a clear understanding of the students' needs to be prepared to the competitive job market which will be my North Star when it comes to delivering the teaching and learning materials. For instance,

2 Teaching Interests

I already prepared to teach courses on the following subjects: Artificial Intelligence and Machine Learning, Data structures and Algorithms, Computer Networks, Software Engineering courses, Mathematics (Calculus, Linear Algebra, Probability, and Optimization), digital signal processing, signals and systems, Cloud Computing. I am also open to prepare to teach other subjects are required by the department. My understanding of, and practice in, effective learning, teaching, and assessment and feedback have been well developed. I am looking forward to continuing my commitment to excellent teaching at Carleton University.

3 Teaching Philosophy

My Experience framed my teaching philosophy which, in conclusion, is centered on creating a dynamic, inclusive, and student-centered learning environment that fosters intellectual curiosity, critical thinking, and academic excellence. For my point of view, teaching is the act of communicating knowledge and coaching minds to think critically. Teaching is about stretching the brains, not just filling them with information. As Plutarch (45 AD—120 AD) said: “the mind is not a vessel that needs filling, but wood that needs igniting.” To make the teaching intellectually rewarding for the students, I believe that the instructor must set high standards for the course and maintain motivating his students to adopt the deep learning approach. To make that happen, I believe that the instructor should create a non-threatening and fun learning atmosphere in which the students can explore new concepts, make mistakes, and get feedback without any judgment. Moreover, the instructor should also pose stimulating and intriguing questions that are very challenging for the students. In my opinion, teaching is about training the students to analyze and interpret the meaning of each formula or text.