

Ibrahim AbuAlhaol

Teaching Statement

A teacher is like a candle, it consumes itself to light the way for others. I lost the count of how many times I heard that saying from my mother. Soon it became a part of me, not just something I knew. My mother along with others has influenced me on my search for excellence in all my teaching endeavors. Teaching is a continuous dialogue with the students to teach them the importance of critical thinking. I am always motivated to share my experience with my students through teaching and advising.

Teaching Experience

My teaching experience includes working as an **Assistant Professor (2009-2014)** at Khalifa University, United Arab Emirates, and working as a **Teacher Assistant (2005-2008)** at the University of Mississippi, United States, and working as a **Lecturer (2002-2004)** at Jordan University of Science and Technology, Jordan. I had the opportunity to work with experienced faculty members where each of them had a unique approach to educate and teach which influenced and diversified my teaching approach. I taught the following undergraduate courses:

- Probability and Statistics, Khalifa University.
- Wireless Communications, Khalifa University.
- Communication Networks, Khalifa University.
- Modulation and Coding Techniques, Khalifa University.
- Digital Communications I, Khalifa University.
- Introduction to Professional Engineering, Khalifa University.
- Communication Engineering Project Laboratory, Khalifa University.
- Engineering Analysis II, University of Mississippi.
- Microwave Circuits Lab, Jordan University of Science and Technology.
- Analog Communications Lab, Jordan University of Science and Technology.

Teaching Philosophy

During my teaching activities, I learned how to develop simple, clear, interactive, and exciting ways to present the course material. My first concern was to attract and sustain the students' attention in class. In this context, in addition to the deep theory development, I used practical and common physical approach to clarify complicated concepts. In fact, I prepared slides and animations to describe any complicated material in a simple way. I always emphasized the importance of the subject, and usually relate the course material to the rest of the field and also to the industry so that the students have a multi-dimensional view.

In senior undergraduate classes, I require students to do extra readings and survey selected relevant topics. Students may be asked to do projects individually or in groups, depending on the number of students in the class, the available resources, and the nature of the project itself. My teaching philosophy distinguishes between the ways that the practical undergraduate and graduate courses should be taught. Undergraduate classes motivate the student to enter the industry easily after graduation.

The faculty message is not limited to teaching and conducting research. It also extends to advising the students. I believe that the advisor should provide timely feedback to students, helping them refine their ideas. I will aim to create a well-organized style of work with clear goals and deadlines to ensure student's progress toward graduation. Another important role of the advisor is to encourage students to interact with each other and learn from each other by facilitating an interactive environment.

Course Development and Interests

During my work as an **Assistant Professor (2009-2014)** at Khalifa University, I was part of a team who developed a project laboratory course where the students guided through a series of structured laboratory sessions to design, implement and test wireless communication embedded systems. The main goals of this course are to (i) endow with the idea of time management, teamwork, and work sharing, (ii) enable the students to utilize most of the engineering theories and practices in realizing a project, (iii) enhance students' skills in applying engineering techniques in a multi-disciplinary project, and (iv) develop students' research skills.

During my **M.Eng. (2014-2015)** study at Carleton University, I attended the following courses in technology innovation management: (i) Principles of Technology Innovation Management, (ii) Technology Entrepreneurship, (iii) Customer Value Creation in Technology Firms, (iv) Research Methods in Technology Innovation Management, (v) Integrated Product Development: Open Innovation, and (vi) Advanced Topics in Technology Innovation Management: Cyber-Security. I am confident in my ability to develop and teach similar courses.

I have the immediate ability to teach core courses such as Electrical Engineering Principles, Wireless Communications, Computer Networks, Communication Networks, Probability and Statistics, Foundations of Management and Entrepreneurship, and Professional Engineering. I will do my best to provide students with examples of the latest developments and technologies as well as to expose them to hands-on experience through labs and projects.

Building on my research and industry experience during my work at Qualcomm Inc., Broadcom Corp., Carleton University, and VENUS Cybersecurity corp., I am highly motivated to propose industry-oriented and research-oriented courses. In these courses, students will get the necessary background (i.e., mathematical analysis, modeling, and simulation) that enables them to analyze and solve industry-related real-world problems.