TEACHING STATEMENT

My goal in teaching is to foster the acquisition of a base of concepts and learning skills to facilitate further learning and thinking. In all of my courses I guide students in the evaluation of evidence, critical thinking, argument development, verbal and written expression, and the application of general principles to novel settings.

Based on past experience, I found all aspects of teaching to be stimulating and rewarding: lecturing, interacting with the students, formulating problem sets, and lab experiments. As a junior faculty, I would be pleased to teach in basically all topics of the undergraduate Mechanical Engineering curriculum. In particular, I have a solid background in Micro Electromechanical Systems (MEMS), Fundamentals of Materials Science, Introduction to Manufacturing Processes, Mechanical Design, Theory of Machines, Strength of Materials, Mechanics (Statics + Dynamics), Engineering Drawing and Programmable Logic Controllers. I would also enjoy directing lab and project courses in my areas of interest. At the graduate level, I would be interested in teaching and enhancing courses in Microfabrication of Microelectromechanical systems /Microsystems and Design of Micro-Electromechanical systems /Microsystems.

In my teaching efforts to this day, I always strive to provide the intuition behind the techniques and theories being presented, and to draw the students' attention to the fundamental concepts underlying the material taught. In addition, when presenting basic mathematical concepts or abstractions, I seek to identify the potential applications of these concepts in the solution of real-world problems. This can help attract and uphold students' interest, which is, in my view, a crucial element of effective teaching. One of my goals as a teacher is to get students to think critically, instilling on them a taste for challenging what they are taught. As engineers and scientists, we spend most of our time challenging established or perceived facts, and this is arguably the way we mature and manage to solve problems. Moreover, I favour an accessible and interactive teaching style that invites student participation. Guided class discussions that encourage the students to think of potential solutions to a given problem are a great tool, especially at the graduate level.

In addition to making changes in response to student progress towards course goals and student feedback, I continually refine my teaching techniques by attending workshops offered by the center for Teaching Excellence in Benha University and Northern Border University in KSA and seeking informal consultation with experienced colleagues. As a

result, I feel I am improving and evolving as a teacher. Even after several years on the Benha University, I think it is important that I look for additional ways to grow as an instructor and to prevent my teaching from getting stale. I will continue to look for opportunities to create new courses, and to fine-tune and update my current courses by incorporating innovative teaching techniques and presenting students the most up-to-date research and theories.