

Introduction

My seeking for academic career comes from the natural characteristic of education process and environment which requires a high level of intelligence and communication skills in dealing with students. My academic background and career as a system engineer in many fields have made me well-prepared to teach general mechanical and mechatronic modules, under- and postgraduate levels, such as: engineering dynamics, control theory, MEMS, design of mechatronics systems, electro-pneumatic and hydraulic systems, autotronics, microcontrollers and microprocessors, intelligent and fuzzy control systems, signals and systems, electrical and electronic circuits, programming tools using C++, mathematics, computer aided design ...etc. My industrial experience has also given me the opportunity to prepare the engineering modules in my field in a way to fit the industrial desirous, at the same time preparing students well for further education.

Teaching philosophy and style

The most important thing in the teaching process is to make a subject as a very interesting, entertaining and enjoyable, rather than showing challenges and dumb theories and equations. By convincing the student of the simplicity and beauty of the topic, at the same time showing the topic's importance and applicability in solving real world problems, then more than fifty percent of the education process would be done.

A special attention I pay for the introductory modules, where many newly concepts take place and students are unfamiliar with it. Teaching the students how to deal with new concepts is more significant than showing again a dumb equation with aplenty of variables. In introductory modules, I should try to focus on the field concepts and discussing what the next concept would look like. I am also responsible to give a clear definition with many examples of any concept with emphasizing on practical and industrial examples. Encouraging the student to prepare for next chapter is great, but it is my responsibility to explain everything in details particularly for student who has low intelligence level.

Intermediate level concepts should be described and illustrated in a manner that the student would be able to establish a relationship with the elementary field concepts, and prepared well for more advance concepts.

For high-level modules, again all new concept should be explained and elucidate by me, however at this level I would emphasize on collaboration and team work. Less attention is giving to the exams as assessment method and taking the team projects and assignment as the main technique to assess a student performance. Teaching the planning, organizing, and time management skills at these levels is more important than anything else at this level though.

Regarding to teaching style, my personal teaching style is characterized by creating an active environment by engaging with students, make them feel comfortable and happy in the class with paying full attention. This could be achieved by being close to the students more than anyone else, not only in the class, in the office hours, after that and even off campus.

On the other hand, the grading system should be totally clear and understandable since beginning. Setting an appropriate exams and assignment would encourage the student to study in the desired way. The exam should be hard enough to make some competition between students, at the same time it should be realistic.

Finally, I believe strongly that the quality/attitude of students is different from institute to another, from a country to another ...etc, thus I would have to adapt myself to the students rather than expecting students to adapt themselves to my teaching philosophy and style.