

Teaching Philosophy

Based on my experience of being both a student and a teacher, I developed a teaching approach to include specific and essential elements at the core of my teaching strategy. Effective teaching is not merely about mastering the course material and transferring the knowledge to students. Rather, I believe that great teachers are those who can aid students see the application of knowledge in their future careers. I believe that understanding "how" knowledge can be used is just as important as comprehending the knowledge itself. This allows students to keep their accumulated knowledge in their long term memory rather than just focusing on passing the course and losing the learned information as time passes by.

With no doubt, a passionate and devoted teacher helps in increasing the students curiosity, inspiration, and alertness during lectures. However, this alone does not guarantee effective learning by the students, unless coupled with a teaching approach which is tailored to specifically meet the students needs. During my teaching at the American University of Beirut, I had students with different learning abilities and this has given me a constant desire to improve my teaching skills by implementing new techniques to tailor for their different learning abilities. These techniques include *differentiated instructions* which involves presenting course material using a variety of methods e.g. verbal explanations, visual demonstrations, examples etc. For example, during laboratory sessions I develop a general list of instructions for all students, and then give students additional instructions on an individual basis to addresses their learning abilities. In addition, I collect as much feedback as possible from discussions with students and learning outcomes evaluations. Moreover, I conduct a self-prepared evaluation twice per semester, which provides me with crucial information that helps tune the course material as the semester progresses.

Being in the ever-changing field of technology implies that a successful teacher is one that is constantly following up and is upto date with new technology and current trends. More importantly, a teacher must be able to cater and introduce these new technology into the course material. For instance, data science and machine learning are clearly current trends and have become merely essential skills for any computer science graduate. Therefore, I am following online courses to help me master these skills so I can transfer my knowledge seamlessly to students.

My objective as a teacher are to foster critical thinking, and improve students problem solving capabilities. One way to achieve this is through allocating some time for student-prepared analytical critique presentations in which the students are given a simple research article to critically analyze it, evaluate its contribution, and present their suggestions of further theory-testing or problem-solving methods. Such activity would encourage students to be inquisitive and skeptical learner while at the same time enhance their presentation skills. In addition, I am an advocate of maintaining students motivation to learn during class. I do so by posting simple questions frequently to keep the students engaged. In this way, my interactive lectures tend to actively engage students and improve their motivation towards learning.