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My personal involvement in teaching at a formal level started in 1999 when I entered the “the Ecole Normal Supérieur” in Dakar. I received intensive teaching training which has contributed to my pedagogical skill and my enthusiasm for teaching. I also have to mention the impact several teachers have had in my life. These teachers were caring personable and enthusiastic with great attitude. Being in their class gave me the opportunity to not only learn the material in question, but more importantly to observe and learn the techniques they used to transmit their knowledge. Now that I am an instructor, I strive to incorporate and innovate these characteristics into my teaching .

I believe that good teaching is a product of preparation, effort, good attitude, patience and show the students respect when interacting with them. Before I walk into a classroom, I always make sure that I am confident enough to answer questions on the fly and be able to modify the lecture on a fly to suit circumstances. I do understand that mathematics is hard enough for certain students and do my best to avoid putting barriers between me and my students. I put effort in speaking clearly, writing clearly, and have a good blackboard technique. My main objective when I walk into a classroom, is to deliver the lecture as clearly and effectively as possible. I introduce concepts through examples, and illustrate them through examples to help the students to fix the ideas. Students learn in many different ways. It is my responsibility to find a balance between various methods of teaching, to adapt them to the student’s learning style. I combine discussions, group activities and get students to go to the blackboard when appropriate. Before I introduce a new concept in class, I always give the students some motivational background to help them relate to the new material. For example, to introduce the concept of line integral in my Vector Calculus class, I fit it into a logical evolution of the student’s background by starting with integration of functions of one variable and have them agree that they know how to do it. Next, I move on to integration of functions of two and three variables over surfaces and solid regions respectively, again I check with them what they have learnt for dealing with such integrals. Once I get their attention towards integrating functions over regions in the plane or in the space, I smoothly introduce the concept of line integral (again through example), by taking a simple function of two variables, sketch the domain on the blackboard, draw a curve inside the domain and engage the discussion about how to integrate the function on the curve but not on the whole domain of the function. After I introduce the new concept, I illustrate it

through a carefully chosen example which will help them understand and fix the ideas related to that new concept.

I believe that to be a good teacher you must respect yourself and your students. You must want to be a teacher, believe that you are well qualified to do so. A good teacher must treat the student's questions with respect. By showing the students respect and genuine interest, you give them comfort and confidence to ask questions, raise objections and discuss ideas without fear of making mistakes. This requires a great deal of patience. I endeavor to make my classroom a comfortable environment where student can explore new ideas without fear. The students need to perceive that you care. It does not require much effort to show that you care about the class. If they do well on a test congratulate them and celebrate with them. If they do poorly, give them encouragement and advice that could eventually help them in the future.

As the instructor in the classroom, I demand a certain type of behavior from the students and enforce discipline inside the classroom for a favorable learning environment. However, we must avoid to diminish the student's self-respect in the course of a disciplinary action. After all, the students are young adults and should be treated as such.

Good teaching also requires good techniques as well as good time management skills. When I give a lecture, I put effort to cover the scheduled material in the allotted time. I also prepare some extra material to fill up extra time. There are many technology resources that can be used to facilitate student learning. For instance, using the associated graphing calculator view screen and the calculator-based laboratory attachments, you can help the students graph functions more quickly. This could give them more time to explore other properties of the functions and draw connections between equations and graphs. I believe that technology can be effectively incorporated in the classroom for mathematics instruction when appropriate

When assigning homework, I make sure that the homework is not too long or not too short for the amount of time allotted, and that it touches on all of the most important topics. I also believe that the homework should drill the students on the material that you want them to learn and the material over which they will be tested on. The exam should consequently be based only on the material that the students have seen in the classes and in the homework. However, I believe that the students' creativity should also be tested by designing special handout problems or projects and give them reasonable time based on the level of difficulty to work on them.

I hold regular office hours and meet with students who can't make it by appointments. Office hours are great opportunities to get to know my students personally as people and give them the opportunity to know me as well. I believe that office hour is a way to step out of your role as instructor and let the student know that you are a person. It is a way to become acquainted with some of your students. Office hour may also help you get a feeling for how the class is doing and what problems and concerns have arisen.

In addition to being the primary instructor for several undergraduate mathematics courses at the University of Arizona, I had the opportunity to run weekly recitation sessions and review sessions for graduate core courses and advanced undergraduate courses in analysis. I believe that the teaching

problems that arise in an advanced courses are rather different from those in a lower division because the student are more mature. However, the advanced undergraduate students may not have the experience and background in rigorous thinking as the instructor when he or she was a student. Any hard theorem should be suitably motivated and do more examples that seems necessary. I believe that extra effort should be done to help advanced undergraduate students in mathematics to be enthusiastic and interested in learning mathematics. The initiative of having the advanced undergraduate students to work on research projects involving mathematical modeling is a way to keep them interested by showing them the usefulness of mathematics in solving problems from other disciplines. Being a mentor for the mathematical modeling class at the University of Arizona gave me the opportunity to get involved in undergraduate research and help the students in my team to learn to model real life phenomena with mathematical symbols and to come up with their own model for the project assigned.

Mathematics has deep and stunning applications, but the student cannot begin to appreciate them until he has mastered a large number of the preliminary steps. Our job as instructors is to provide those steps and forces the student to stick to them and to spend a proper amount of time on each. We set a pace for the students, teach the students to read mathematics, and help them to become engage in the learning process.