

## TEACHING PHILOSOPHY

I was born and raised in a remote area in Bangladesh, where there was no elementary school within its 5 miles radius. To educate me my father sent me to a family friend's house which is more than 12 miles away from our house when I was 7 years old. I was doing well there and once in a while my father would go to see me. However, I lost my father when I was in grade 7. My single mum was struggling as our financial situation was deteriorating since he passed away. My maternal uncle advised me to tutoring. I was fortunate that I was good in math and would teach math after school to meet my expenses. I would teach math, biology, chemistry and physics throughout my undergraduate and graduate years in Rajshahi University. After graduation from University, I started two tutorial centers Progressive coaching center and Reliance coaching center in Paikgacha and Khulna, respectively. In addition to class room teaching in Biology in Dumuria college, I have one to one tutoring as well as small group teaching experience. *I personally believe that to achieve the goal of helping students is not just a simple lecture on a specific topic in class room. I do believe that to be successful in teaching an educator must have a teaching strategy that guides the delivery of the course content and specific tactics that can be used to achieve success. Several of the principles that I would like to use to guide my teaching activities are presented below.*

***I believe that one of the most important ways for me to provide high quality teaching is to be well prepared for each and every class period-*** As a student I observed many lectures where the professor was ill prepared. I vividly remember the frustration that my classmates and myself felt in my Genetics class. I also remember that, as a consequence, many of the students were not well focused and did not respect the teacher. Therefore, I always strive to be prepared by knowing the material, having visuals prepared, and ordering the class in a logical and consistent manner when teaching any class and particularly, Biochemistry and Physiology. I believe that if the teacher is knowledgeable, students pay more attention in the class and consequently, learn more effectively. Of course, I do not believe that I could know everything about the topic or should try to nurture this impression to my students since it would present a false impression many students would attempt to test and consequently discuss, eroding the credibility of the teacher that is part of the key to teaching effectively. Rather, it is critical that I know the material well enough to help the students. In addition, I believe that to be an effective educator I must know pertinent information about each of my students. I should be knowledgeable about things like their skills, their reasons for taking the class, and their expectations about the class. These are questions that one can begin to answer at the beginning of the class when initially getting to know the students.

***Quality is a critical part of effective teaching-*** One of the tools that I have used to incorporate quality improvement into my courses is a supplementary evaluation form. This supplementary form includes both open-ended and scaled questions that deal with both general and specific issues that are pertinent to each course. By monitoring and tracking these evaluations, I have been better able to monitor each course more. In this case, students are the most important evaluators of mine.

***To properly educate students at the university level, an educator must make the material he or she is teaching pertinent to students-*** Often this means that material should be taught in such a way that each student is able to relate to the material and apply it to his or her life and career. This can frequently be accomplished by providing real world examples and

cases that demonstrate the concepts that are being taught. For example, I frequently like to utilize current events to illustrate important concepts and ideas. By discussing information that is in the news and relating such information to the course, students often maintain higher levels of interest and are better able to see how the concepts operate in a real setting.

***To provide high quality teaching, an educator should be willing to change the way that he or she teaches-*** I am open to change and constantly try to reevaluate the courses that I teach with the goal of improving the material and the teaching environment. In addition to changing the broader components of the course, I also try to vary the way I present material to students on a day-to-day basis. It can be somewhat counterproductive to use the same lecture style day after day. Therefore I often vary the mode of presentation by using, for example, the whiteboard on one day, PowerPoint the next day, and hands-on lab instruction on the third day.

***Students to be expected to act responsibly, to learn to be professional, and to meet high standards in the classroom-*** To achieve these goals I require that students adhere to deadlines, that they produce quality work, and that they act professionally in their interactions with one another and with me. To make sure that all students have the same opportunity to achieve these goals I always attempt to make my expectations about required performance clear, both in written as well as verbal instructions. In addition, I also attempt to be fair to all of my students by being impartial in grading and in interacting with students, and by treating individuals with respect.

***The classroom should not be a venue for one-way communication-*** An important part of the learning process is expressing individual opinions and receiving feedback about these opinions. Therefore I would like to use a number of approaches to encourage individual students to participate. For example, I generally require that students in my courses earn participation credit via activities both inside and outside of the class. Further, in all of the classes that I would teach I frequently call on individual students to answer questions or respond to my inquiries. Sometimes I would ask my students at the end of the chapter to make a set of potential questions and I would provide them bonus points. *While I was teachig biology in Dumuria college, I found this is one of the most effective approaches to get students involved in the course content.* This is largely due to the fact to prepare a set of insightful questions, students have to read the chapter thoroughly and understand it fairly well. Finally, in project-based courses involving difficult concepts I generally ask students to work on in-class cases and exercises. I have found that practical examples help students to better understand complex concepts because each student will need to actively focus his or her thinking on the concept rather than passively listening to a lecture.

***Learning is something that should be fun for all concerned-*** I think that the best way to learn is to make the topic enjoyable and to create an environment in which students can have a good time while they learn. I, therefore, try to inject not only humor into lectures and discussions but also make projects challenging and enjoyable. One of the best ways to augment this is to maintain a high level of excitement about the topic and express that excitement to students. In this way I hope to spark the flame of excitement from learning. I also like to take other approaches to make students excited and focused, by giving interesting background of the topic. *I found that this tactic works well as I saw a noticeable motivation of many students.* For example, when I teach cyclins, I will discuss how undergraduate students were involved in the discovery of cyclins. In addition, I have found

that elaborating the scientist's personal life story motivates students in the classroom as well as in laboratory settings. For example, when I talk about DNA or DNA polymerase I, I always give some brief background information about Arthur Kornberg and Roger Kornberg who won the Nobel prizes as a father and son, respectively. I found that relating science to individuals and providing some personal touches tends to make the students become more enthusiastic about what they are doing/learning which is a key component of effective learning.

***I think undergraduate students should carry out individual research project-*** I will also show interest in getting to know the undergraduate students who are interested in research. I will give them a chance to visit my lab while other senior students are working in my lab. I believe that in this way, many students can be motivated in research which helps them to understand research methodology as well as helping them keep up in their ongoing classroom topics.

Finally, I would like to inspire growth of my students by giving them tools to take into other disciplines and into other domains of their life. Among those tools are a sense of curiosity, open-mindedness, and a thirst for knowledge. I would strive towards having my students observe and begin to question the purpose and meaning of learning and its importance. Although my passion is in biology in particular, one of the greatest goals I have is to teach my students to become motivated, insightful, and enthusiastic thinkers.