During my orientation as a first time teaching assistant, the director of graduate studies gave us the following advice: “Think about what your favorite teachers do, and do as they do”. This led me to think carefully about the teachers who made a difference in my life, and how I would look forward to their classes each week. While these teachers did not have the same teaching styles, they had something else in common: they all promoted independent thinking and they held me accountable for my own learning. They gave me enough tools to assist my learning but it was clear from the start that it was my responsibility as a student to think critically and to be disciplined in order to succeed in their classes. This is the kind of teacher I aim to be. As a passionate and effective teacher, it is my responsibility to create a positive and engaging learning environment that supports various learning styles where students feel safe and encouraged to reach their goals while instilling a sense of student responsibility.

Engaging students starts by showing that you care about the class and that you care about them. This can be achieved through my preparation and organization, but more importantly I make them feel welcomed by learning their names promptly. On the first day of class I ask the students to fill out index cards with some personal information, such as their hometown, their feelings towards mathematics, their last mathematics class and their favorite hobby. This gives me an idea of their mathematical background and any fear of mathematics or anxiety they might have. The other information is crucial to help me connect with the students. I also have them partner up with a classmate and interview each other and then introduce their classmate to the class in order to encourage them to socialize right from the start. It is important to me that the students establish a connection with their peers and that they feel part of a community where they know it is safe to discuss ideas.

At the beginning of each class, the students can see the main points of the lesson written in a corner of the board in order to know what they should take away from the class. We begin class by reviewing the main points from the previous lesson in order to provide continuity. Afterwards I present a related real world problem to spark curiosity in the students. For example, when we talk about exponential functions in a precalculus course I present a problem on calculating the profit on a given investment or on bacteria population growth. Once I have their attention, I show an example that illustrates the most basic concepts separately. I then proceed to slowly build up to more complex examples that require several of the concepts used in conjunction. This bottom up approach helps the students grasp concepts slowly, build confidence step by step, learn how to combine basic concepts into ever more sophisticated problems and how to think effectively. Once the students have seen some examples, I distribute worksheets so they can practice what they have learned. They are always encouraged to talk among themselves and ask me questions. By allowing them to work in groups of their choosing they get to clarify their doubts in a low-risk setting. Typically, some time at the end of class is reserved to work out a problem together on the board.
Often times students begin college unaware that the biggest obstacles they will face are not necessarily academic but related to their newfound freedom. It is my duty as a teacher to help them stay on track by providing them with deadlines and weekly work to assess their progress. I make a point of giving them frequent feedback in the form of weekly quizzes and homework to avoid having students falling behind and to teach them to take responsibility for their future.

When preparing a lesson, I take into account the fact that different students have different learning styles. I structure my lessons to include a variety of styles such as lecture, hands-on work, group work, play on intonation of words for auditory learners, and visual representation of concepts whenever possible. In the future I would like to incorporate active learning techniques such as flipped classes into my lessons, so that class time can be spent mostly on hands-on activities.

While I always strive to give the students enough guidance, I like to push them to their full potential through thought provoking questions that drive them to nontrivial results. It is very gratifying whenever the students tell me at the end of the semester that their perception of math has changed because of my class. For instance, a student commented the following: “I hated math. My distaste for the subject was drastically changed after I took Calculus for Business with Leyda as my TA. Through her clear and concise explanations, her fun and energetic approach to teaching, and obvious passion for the subject, Leyda was not only able to help me succeed in math, but she also (by some miracle) got me to enjoy the class.”

Of course being an efficient teacher is a journey and not a destination. If we think we have arrived, we get complacent and stagnate. I try to be always aware of the areas I need to improve and to try to get better at what seems to be effective in my teaching. One of the most important things for my improvement as a teacher is careful study of student evaluations\(^1\). This is why I always give students voluntary midterm evaluations. From them I get a picture of what works and what does not work with enough time to take the students' input into account. I try hard to be responsive to the students expressed needs and to integrate in my teaching ways to address their concerns. In general, the students seem pleased with the modifications made after the first midterm evaluations. One student commented, “I liked the changes you made after the first evaluations i.e. (writing higher, explaining slower and in depth). Overall good class.”

Developing life-long independent thinkers, providing the necessary tools to succeed in a safe environment, carefully studying student evaluations and constantly learning about the art of teaching are some of the important aspects of being an effective teacher.

\(^1\) A list of all the end-of-semester evaluations can be found in my online teaching portfolio.