

I primarily have experience teaching introductory college courses, and in these environments I recognize that not everyone in the classroom has an affinity for mathematics. When presenting new material, I emphasize connections to material we have already covered, underscoring the importance of past material. I take the time to step back and provide direction and context for where we are going, as a way to deter students from getting overwhelmed and lost in the details. I want students to always have an answer to the question "Why are we doing this?". Mathematics is not taught in isolation, and emphasizing these connections is crucial to developing problem solving skills and critical thinking.

While teaching, I focus on creating an open atmosphere where students feel comfortable asking questions and making comments. During a lesson, I regularly ask questions to the class to keep students engaged, and encourage participation. I regularly assign work to be done together in groups, giving students an opportunity to practice problems similar to what has just been covered while it is still fresh in their mind. By working together in small groups, students are encouraged to explain new concepts to their peers, thereby strengthening their own understanding by being active in the learning process.

I take great pride in presenting material in as clear a manner as possible, both audibly and visually. I take the time to write clearly, legibly, and so it is visible from the entire classroom, and am deliberate in my choice of words. Diagrams are clearly labeled, and important definitions, results, or theorems are labeled as such. I aim to have the student's written notes as a valuable and useful resource for preparing for exams later in the course and beyond.

For example, one section that is notorious for being difficult for students in the University of Arizona's first Calculus and Applications course is on optimization problems. These calculations are not the type that lend themselves to simply a "turn the crank" approach, and instead force students to extract the relevant information from a problem, determine themselves what equation needs to be solved, and then solve the problem. I see this as a great opportunity to develop problem solving skills, and I encourage students to take a moment and articulate "What exactly are we being asked to solve?". As they clearly extract what it is that is known, and what it is they are trying to find, and the path between the two becomes a bit less opaque. I particularly like this section because the problem solving approach is not necessarily algorithmic - it is beneficial for students to see a variety of different problems to see the variety of paths to the solution that are possible. I aim to develop intuition in this section, watching students grow and make these connections on their own.

Apart from the standard exam structure for these courses, I regularly assess student's progress through written homework and short quizzes. I take grading homework as an opportunity to offer bits of individualized feedback to students, frequently commenting on the concepts which seem to be the source of confusion. My own student evaluations from the courses I have taught have been overall quite positive, scoring above the benchmarks provided on a consistent basis.