

## Teaching Statement

Olgur Celikbas

---

As a graduate student at the University of Nebraska–Lincoln, I have been fortunate to have had a variety of teaching experiences in a mathematics department that is nationally recognized for its teaching excellence. I have taught introductory freshman courses such as calculus recitations, college algebra, pre-calculus, calculus, and also a more advanced undergraduate course, abstract algebra. In addition, I have been involved in a number of special programs that formed the skeleton of my teaching philosophy. For instance, I took part in the Institute for International Teaching Assistants, ran the Math Excel Calculus workshop, and worked at the Mathematics Resource Center as a lead counselor.

The goals I strive for as an instructor are to deepen students' mathematical knowledge and curiosity, to improve students' patience for mathematical challenges, and to create a classroom atmosphere where students are comfortable asking questions and sharing ideas. I want my students to feel enthusiastic about mathematics and be able to express themselves using correct mathematical language. Being an approachable teacher not only in class but also outside the classroom is very important for me. If one can create a good connection with the students and help them adjust to the class during the first two weeks, then the rest of the semester will go more smoothly for students, and they will put more effort into succeeding. On the first day, I ask my students to fill out an index card with some personal information such as names, majors and mathematical backgrounds. These cards help me to set the pace at the beginning and learn their names quickly. I also require office visits for everyone the first week. During those visits, I chat with each student about course policy, expectations from the course and math study habits. Hence, I start developing a dialogue with the students for the rest of the semester.

Good preparation and organization are the key components of my teaching style. I carefully plan every activity, example or discussion to increase students' engagement and attention. At the beginning of my classes I make an outline of the main ideas on the board and ask my students questions about the previous lecture. This helps the students remember what we did last time. It also helps me assess student retention and make a smooth transition to the next section. I try to break the subjects down and give many examples, especially in lower-level classes. I also believe in the importance of preparing practice exams or review sheets before each exam as a reference for the students. If needed, I run additional review sessions outside the class. I use graphing calculators for demonstrations and often give Powerpoint presentations. I particularly like using websites such as Blackboard and MathXL for my classes. I post every assignment, quiz and exam solution on the Blackboard system. In addition, I create forums on Blackboard and collect feedback and comments from my students in a confidential, relaxed manner.

My teaching experience at the University of Nebraska–Lincoln started when I participated in the Institute for International Teaching Assistants (ITA) in 2003. I became a micro-teaching instructor at the same institute in the summer of 2008. The ITA is a multi-purpose intensive summer program designed to prepare international graduate students from various university departments to teach effectively at American universities. It was great to be a part of this program, for many reasons. For example, I had the chance to observe presentations of this diverse group of people during the micro-teaching sessions. We discussed how to create effective presentations, interact with students, and deal with difficult situations in the classroom.

In addition, we explored giving and receiving constructive feedback, using visual aids efficiently in the classroom, and student-centered teaching methods.

I worked in the Math Excel Calculus Workshop during the academic year 2005–2006. Math Excel is a nation-wide program modeled after the Emerging Scholars Program at UC Berkeley. It combines both active and cooperative teaching methods. I participated in the instructor workshop at the University of Texas–Austin for a week, to learn about guiding group work and producing effective problem sets for students to work on in class. The workshop at the University of Nebraska–Lincoln concentrated on the needs of diverse groups of students: first generation college students with potential to be successful in calculus, women in science and engineering, and graduates of small, rural high schools. Unlike a regular one-hour recitation, the class meets for two hours, with the students working cooperatively on challenging worksheets in small groups. I worked with an undergraduate teaching assistant who helped me give hints and provide encouragement to the students in class. The main idea was to make students discover their own solutions to the problems. This was not an easy task, but encouragement, motivation and group work made it possible. When students couldn't figure out a problem, I only gave hints and asked questions that put them on the right track, never telling them how to solve it immediately. If only one student found the answer, I asked him/her to explain the solution to other group members. Sometimes they used different approaches to the same problem. In that case, they shared these different techniques with everyone. Being involved in this workshop has greatly influenced my teaching style. Both the students and I enjoyed the Math Excel workshop. The student feedback was uniformly positive on the course evaluations. They were happy to learn the importance of the thought process needed to find the answer.

In summer 2008, I taught an advanced course, introduction to modern algebra, to a small group of students. Teaching this class was the most satisfying and challenging teaching experience I have had. Most of my students were in mathematics-based disciplines. My main goal was to have the students work in small groups for weekly assigned homework sets that consisted of 15–20 problems. This class had a unique difficulty; students were so competitive that it was not easy for me to incorporate group work. I overcame this difficulty by changing the students' groups every week. As the students were not familiar with the abstract side of mathematics, I started each of my classes by explaining how to interpret theorems and proof techniques. I also presented many examples to clarify the concepts and helped my students for about an hour every day outside the class. As a result, 12 out of 13 people passed the class with high marks. In my end-of-semester evaluations, many of my students wrote very positive comments and thanked me for helping them succeed in class. Teaching introduction to modern algebra was my first formal chance to mentor future graduate students in mathematics. One of my students conducted undergraduate research the following summer and now is planning to attend graduate school. In the future I hope to teach such courses again and continue to mentor advanced undergraduate students.

I have worked as a lead counselor at the Mathematics Resource Center (MRC) for five years. MRC is a free tutoring service for students taking mathematics courses at or below the second semester of calculus. Working in the MRC has given me both the opportunity to tutor for courses I have not taught as a principal instructor, and the experience to identify common trouble spots. I have transferred this knowledge to my classroom setting.

I like teaching and I strive to create a classroom atmosphere in which the students enjoy learning mathematics. I am looking forward to working in a department that emphasizes using technology, increasing diversity, and providing a creative and collaborative teaching environment.

## Students' Comments for Olgur Celikbas

This is a selection of comments students have written on my teaching evaluations for three of the classes I have taught (College Algebra, Math Excel Recitation in Calculus and Abstract Algebra). Professor Mark Walker, who is writing a letter of recommendation for me, can verify the accuracy of these quotes.

- “I have taken this class before and failed. I always felt like the teacher was trying to trick me into failing. Now I feel like the instructor wants me to succeed.”
- “This class is fast paced, but Olgur Celikbas has done a great job at presenting information and making sure everyone understands. He is a great teacher, compared to a tenured professor. I had a similar class last semester. Olgur blows him out of the water.”
- “I liked how Olgur did not follow the book verbatim like many other teachers. He came to class prepared with his own examples. He took time everyday to help students understand the material. He also was very helpful during office hours. One of the best teachers I have had.”
- “Olgur Celikbas is the best recitation teacher I have had so far. He knows exactly what he is talking about and can relay it to us in a manner that we can understand, and that greatly helps us with our work. He provides challenge but helps us to a great extent.”
- “Olgur Celikbas is a very good teacher. He genuinely makes an effort to ensure students understand the material. He takes an extremely difficult subject and breaks it down effectively so students can understand.”
- “Olgur: Thank you for teaching Math Excel for the two semesters. Thanks for being so enthusiastic and challenging us to do better. You should teach Math Excel next semester!”
- “He is very helpful outside of class. He tries to answer questions completely and adds extra office hours when needed.”
- “Olgur is amazing and has been a huge aid in this class. I am so glad that I decided to switch to this recitation.”
- “Olgur: Thanks for so much dedication to us and helping us learn to our fullest potential. You should teach Math Excel for Calculus III next semester! The worksheets are a huge help.”
- “Very good instructor. Always ready to help. He has a good personality and is an over nice guy. I also liked how he did not follow the book exactly.”
- “Olgur has been great help to me and has provided many ways to ensure my success. Thanks Olgur!”
- “Good teaching methods. Notes are easy to follow and he encourages questions.”
- “Olgur does a good job at explaining concepts in this course and teaching with examples on the board.”
- “The instructor does everything he can to help to teach this course. This is a very hard course where the student cannot depend only on the teacher's lessons. He does a great job!!”
- “Olgur Celikbas was a great instructor who always went out of his way to help his students.”