

Teaching Statement

W. Keener Hughen

The two cornerstones of any university are research and teaching. Research is essential to the overall success of the university, and extending the body of knowledge through scholarly research is one of the primary responsibilities of the faculty. Equally important to the success of the university and to society in general are the educational responsibilities of the faculty to successfully and effectively teach. This is especially true within the field of Finance because of the relationship between Finance academics and practitioners in the financial sector. This sector needs well educated, highly skilled, and quantitatively sound employees and it relies on academicians to provide a pool of such employees.

I take my teaching responsibilities very seriously. I have taught many different courses at all levels; I have taught Investments, Derivatives I: Financial Elements of Derivatives, Financial Economic Theory, several special topics courses in Advanced Financial Derivatives, Fundamentals of Financial Management, as well as several Mathematics courses. Evaluations from my students and peers demonstrate that I've consistently been a successful and effective teacher.

The main reason I've been effective in the classroom is that I truly care whether the students understand the material, and I work hard to give them every opportunity to do so. I spend the time and energy necessary to prepare and deliver clear and organized lectures and I post the lecture notes on the course website before each meeting. Much of the material cannot be grasped during the presentation and require time and effort outside of the classroom to attain the level of understanding I would like the students to achieve. I also work hard to write suitable homework assignments that help the students obtain a better command of the material, and to write exams that test the students' knowledge and ability to synthesize the material in a way that is both challenging and fair. I developed a case study for FINN

6210 based on an actual company who fell into bankruptcy because of questionable hedging practices. The company used short-dated oil futures contracts to hedge its commitment to deliver oil many years in the future. This assignment helps students understand the hedging benefits and limitations of futures contracts, and while it is intensive, many students tell me they find it very useful and helpful for their understanding of many of the course concepts. I also enjoy thinking of ways to make some of the more esoteric concepts more accessible. For example, to help the students better understand the derivation of the Black-Scholes formula, I have them derive a numerical approximation that many students find more intuitive.

I foster a professional but relaxed atmosphere in the classroom. I try my best to bring enthusiasm and energy (though evening classes often make this a challenge!), as well as a little humor when possible. My job is not to entertain the students, but I want them to feel comfortable enough to ask questions whenever they are confused. I am respectful and responsive to the students.

I also take my other mentoring responsibilities very seriously. I have conducted independent studies with Masters students who want to learn about the research process and what it means to conduct research. I have served as thesis chair for one MAFI student and sat on the thesis committee for another student. I've sat on two Ph.D. dissertation committees (one in Finance and other in Applied Mathematics), and am currently sitting on another Finance Ph.D. dissertation committee. I've also written letters of recommendation for dozens of MAFI and Ph.D. students. The letters have helped many of our students get placed in industry and academic jobs, and they've helped several MAFI students get placed in Ph.D. programs, including several into our own Ph.D. program. Furthermore, every semester I've written and graded questions for both the MAFI and Ph.D. comprehensive exams.

My teaching philosophy has been largely shaped by my experiences in the classroom, both as a student and as a young fledgling teacher. My freshman year in college I had the good fortune of taking calculus with an exceptional professor. It was a very challenging course, and it was probably the first time I ever felt overwhelmed by the material (it would definitely

not be the last). The professor showed more confidence in me than I had in myself, and though his expectations were high, his enthusiasm, compassion, and effort inspired me and I went on to do well in the course and eventually to change my major to mathematics.

Several years later, as a Ph.D. student at Duke University, I taught my first class. I learned many valuable lessons that semester, and I learned them the hard way. I learned that teaching is more than regurgitating the textbook and then demanding the students learn the material without any further help or effort from me. I thought back to my calculus professor, and I realized that if I expect the students to attain a high level of understanding and if I want their confidence and respect, then I must put in the effort to deliver organized and clear lectures, to answer their questions as clearly as possible, to engage them with lively classroom discussions, and to be enthusiastic about the material. I worked hard to achieve these objectives, and a few years later I won my first teaching award for most outstanding graduate student instructor. I also won a teaching award at University of California at Berkeley while teaching in the Masters of Financial Engineering program.

While I have found an overall style of teaching that works best for me, I've continued to look for ways to evolve and improve as a teacher. When I taught FINN 6210 for the first time, my student evaluations, although very near the Department and College averages, were below my expectations. The students commented that the course objectives were not clear and the lectures were not well organized. I realized that I had tried to cover too many peripheral topics and had not covered the relevant topics in enough detail. The following semester I narrowed the course focus and reorganized the lecture notes to add more depth. I also developed the case study and other written assignments that force the students to have a deeper understanding of the material. The students' satisfaction and understanding improved significantly.

This past semester (Fall 2013) I taught a new Ph.D. course in Advanced Financial Derivatives. The course covered state of the art derivative pricing models and was extremely useful for students interested in derivatives research. This was a demanding course to teach and I

thoroughly enjoyed it. The feedback from the students was very positive.

Numerical summaries of my teaching evaluations are consistently higher than the Department and College averages, and indicate the students find me to be effective, well prepared, organized, and enthusiastic. Importantly, they also indicate that I stimulate thinking and that the students learn a lot in my courses. The students' comments further demonstrate my effectiveness, and one student reported I was the best teacher s/he had in the College. Peer reviews of my teaching are consistent with the reviews from my students. According to my colleagues I have done an excellent job and I have "demonstrated the ability to teach advanced materials that are highly quantitative in nature in a very effective and intuitive way."