Teaching an Undergraduate Mathematics Course with Technology – What do the students think?

KARSTEN SCHMIDT

Schmalkalden University of Applied Sciences, Germany email: kschmidt@fh-sm.de

The compulsory course in matrix algebra at the Faculty of Business and Economics at Schmalkalden University is no longer given in a traditional classroom setting (using blackboard, overhead projector, and pocket calculators) but in the PC lab (one or two students in front of a PC, instructor's PC connected to a projector), where the Computer Algebra System DERIVE is used throughout the semester. The faculty's DERIVE license also covers the private PCs of the students such that they can use the software at no charge at home as long as they are enrolled at the faculty. Students also have access to DERIVE during the final exam in the PC lab (here, naturally, only one student per PC). While the course and the examination have taken place in the PC lab for a number of years, it will be the first time that a series of surveys will be carried out (throughout the current academic year) to find out if the students prefer a traditional or a technology-based course, and how well they cope with the technology. Preliminary results from two surveys (Oct 2010, Apr 2011) will be presented.