Suzanne I Doree* (doree@augsburg.edu). Keep them guessing: teaching conjecturing in a discrete transition course. Preliminary report.

How do we help potential mathematics majors transition from lower level, computational, courses to upper level, theoretical, courses or more open-ended experiences such as undergraduate research? Many colleges teach an intro to proofs course to try to meet this need. At Augsburg College we take a different approach, focusing our course on conjectures and counterexamples (well, and some proof). The results have been impressive, both in terms of preparing our students and for attracting more students to the major. This talk describes the overall structure of the course and shows several examples of classroom activities from discrete mathematics that develop students conjecturing skills. (Received September 22, 2011)