Przemyslaw Bogacki* (pbogacki@odu.edu), Department of Mathematics and Statistics, Norfolk, VA 23529. Self-Assessment Homework in an Online Linear Algebra Class.

When developing our online linear algebra class, we faced the challenge of a disconnect between the computer-based components of the course (watching pre-recorded lectures and participating in Blackboard assessments) and the major exams (midterm and final) on which our students are expected to solve linear algebra problems in a paper-and-pencil format at a testing site. Our solution of this issue involves the self-assessment homework problems assigned regularly throughout the course. The problems assigned are chosen to reflect the major learning objectives of the course. For each assigned problem, we ask the student to follow these steps: 1. watch a recording of a similar problem being solved by the instructor using pencil and paper; 2. submit an image (taken with a camera or scanned in) of their paper-and-pencil solution; 3. examine the solution key and self-assess their solution; 4. use the Post-Homework Discussion Forum in case of any questions or comments. Access to subsequent steps in this cycle is controlled using Blackboard’s Adaptive Release mechanism. In our course, homework contributes 5% of the course grade and is credited based on completion only. The instructor spot-checks student responses (especially early in the semester, or for underperforming students). (Received September 15, 2016)