

Abstract Submitted
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Mastery Based Homework in Introductory Physics at the University of Illinois¹ TIM STELZER, BRIANNE GUTMANN, GARY GLADDING, MORTEN LUNDSGAARD, NOAH SCHROEDER, University of Illinois — The successful implementation of mastery-style online homework into our preparatory mechanics course has been a long-term project, currently in its second year. By requiring students to perfect a single unit of defined competencies before moving on to its successive unit (with intervening narrated animated solutions for instructional support), this homework delivery method replaced traditional immediate feedback online homework for the class of about 500 students. After the first year of data collection and analysis, significant revisions were made to the system's delivery, content, and messaging. The impact of these changes and second year data will be presented, as well as data from implementation in our introductory electricity and magnetism course.

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