

Abstract Submitted
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Multiple representations and NGSS-based curriculum design for in-service physics teachers JAMES MOORE, University of Nebraska Omaha — We have adapted PhysTEC learning modules on multiple representations and curriculum design into an online graduate course for in-service physics teachers. In-service teachers in the Omaha metro area learned how to use proven tools and strategies to adapt/develop standards-aligned curriculum on topics in motion, force, and energy. Specifically, participants completed modules initially developed by the Physics Education Research Group at Rutgers University, and then adapted existing NASA curriculum materials for use within Nebraska Career and College Ready Science Standards (NCCRSS). This resulted in the adaptation of NASA materials to Nebraska standards, generating classroom-ready NASA-based materials for Nebraska teachers, and the training of new physics teacher-leaders to help their districts prepare for NCCRSS implementation. This course is part of a new graduate certificate program in physics education offered completely online, which integrates with the Masters of Science in Secondary Education at UNO.

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