

Abstract Submitted
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Development of a Physical Science Course for Elementary Education Majors A.A. BASKI, S. HUNNICUTT, Virginia Commonwealth University — We have developed a physical science content course for elementary education majors that is aligned with state standards. The course incorporates several hands-on activities related to the Virginia Standards of Learning that have already been implemented as one-hour lessons in elementary classrooms. Topics include measurement, properties of matter, motion & energy, electricity & magnetism, sound & light, chemical & physical processes, weather, and the solar system. In addition to the hands-on activities, course content is discussed in a small lecture format with questions posed throughout the material. The students discuss these questions in assigned groups and then answer them using remote answer devices (see www.einstruction.com). Lastly, conceptual ideas in class are reinforced using online LON-CAPA homework questions that are individually randomized for each student and provide immediate feedback (see loncapa.org). Those questions which indicate a high degree-of-difficulty are reassigned during following weeks to provide multiple opportunities for practice. All of these active learning approaches reinforce basic concepts necessary to teach physical science at the elementary level.

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