Recognizing and Engineering Routes Around the Cognitive Obstacles Encountered by Non-majors in Introductory Physics Courses

NORMA CHASE, MCPHS University, School of Arts & Sciences — How do we ensure that our introductory physics courses provide the kind of background in physics which is most critically important for students preparing for careers in medicine? How do we also avoid terrorizing and demoralizing less experienced non-majors, whose votes will (incidentally) impact crucial funding for Physics Research and Education? The author discusses methods for recognizing and engineering routes around some of the many cognitive obstacles encountered by non-majors, and closes by suggesting a concomitant redesign of the “standard” curriculum for non-majors.