Nathaniel Eldredge* (neldredge@math.cornell.edu). Finding applications is the student's job, or, how to be integrative without really trying: a project-based approach to incorporating other disciplines. Preliminary report.

When teaching courses that attract students from fields outside mathematics, it is often challenging to find and incorporate applications that are relevant to student interests. I will describe my experience in addressing this challenge through a writing project, in which students seek out and research applications of core course material in their own areas of interest. The project is designed to give them practice in accessing the literature, connecting classroom topics with real-world issues, and communicating their ideas through scientific writing. I will discuss some of the specifics of the assignments I have used, as well as results and possible improvements. (Received September 23, 2012)