Steven J Miller* (sjm1@williams.edu), 18 Hoxsey Street, Williamstown, MA 01267. Building YouTube University Brick by Brick.

There are many parts to engaging students. We discuss two aspects: the material chosen, and how to present it. I have twice taught a class on the mathematics of Lego bricks. I use the bricks as a springboard to a lot of great concepts, from combinatorics to game theory to chirality. The final project is to assemble the 3152 piece Superstar Destroyer, as a group, in under 10 minutes; this is a terrific hands-on introduction to Operations Research as they optimizing their construction. It's also one of the few times they supervise a large team and deal with the subsequent issues. In both this and my standard classes I record all my lectures on an iPad, uploading them to YouTube within a few hours of the lecture. The quality of the recording is high, as I use a swivl system which tracks my movement and results in a good recording without the need of hiring a cameraman. There are numerous advantages: (1) students can go back and catch missed lectures or review concepts they missed, (2) students can take the class remotely (this includes former students who have graduated and are considering graduate school, people at other institutions which are not offering a similar course, and also students at my institution who want to also take another course meeting at the same time). (Received August 31, 2015)