

1125-B1-1700 **Anne M. Ho*** (aho@coastal.edu), Conway, SC. *Unlocking Ideas: Using escape room puzzles in a cryptology classroom*. Preliminary report.

Escape rooms have become an increasingly popular game and team building exercise in which participants are locked in a room and asked to use puzzles to get out within a set time limit. According to a recent article entitled “The Rise of Educational Escape Rooms” (*The Atlantic*, 2016), educators are starting to use the ideas of escape rooms in classrooms. A natural setting for such puzzles is an undergraduate cryptology course. In this talk, I will discuss the experience of running an interactive class session where my students were asked to use their knowledge of classical ciphers to decrypt ciphertext, unlock padlocks, and determine passwords. Some topics covered included the shift, affine, Vigenère, substitution, Playfair, and Hill ciphers. In addition, I will address the logistics of implementing these puzzles with the use of the open-source math software system, SageMath. Lastly, I will briefly mention how I have utilized these ideas in other classes such as Calculus. (Received September 18, 2016)