1106-C1-2104 **Joshua E Hill*** (hillje@uci.edu). *Analysis of Substitution Ciphers.*

Solving a substitution cipher is considered "easy", but it isn't always clear how to programmatically break such systems. We outline a standard letter frequency based approach, and consider why this approach often runs into problems. We then outline the greedy dictionary matching techniques described by Olson. We finally describe some of the standard models for cryptographic security and demonstrate why, under these models, substitution ciphers are considered weak. (Received September 15, 2014)