

### **Fall 2023 CIS 3362 Homework #3 Grading Criteria**

- 1) 10 pts – 5 pts Playfair grid, 5 pts answer, take off points proportional to errors. (One error in the box but using the incorrect box correctly is still 9/10...)
- 2) 15 pts – 1 pt determinant,  
2 pts stating inverse in terms of modular inverse,  
3 pts Euclidean,  
5 pts Extended Euclidean,  
1 pt plug into formula and reduce to get answer,  
3 pts to verify via multiplication
- 3) 15 pts – 4 pts writing down four relevant equations,  
3 pts using elimination to solve for a or b  
3 pts using elimination to solve for c or d  
2 pts to solve for other variable's possibilities (a or b)  
2 pts to solve for other variable's possibilities (c or d)  
1 pt to write out all four possible matrices
- 4) 30 pts – If they just state the answer without enough relevant work 10 out of 30  
If they don't get it, give a maximum of 20 points based on the amount of work.  
For full credit, they must both show enough work and also get the final answer.
- 2) 30 pts – 15 pts for code that generates all possible keys (or even just all possible permutations)  
10 pts for arriving at a key that works.  
5 pts for using that key to decrypt and state the final answer.  
If they don't get it, max 20 of 30 (can give them partial 5 pts out of 10 for arriving at the key)