Network Security
CSIS 441
Lab 05

Name _____

- Please upload your answers to the appropriate D2L folder.
- All the requirements for a section must be satisfactory completed for credit.
- The lab must be completed before the due date and time.
- Contact your instructor with your questions about the assignments.
- The student must insure all the answers are free from any malware.
- The student must insure all answers are legal as defined by the class syllabus.

Lab05 - Basic Cryptography

5.1. This section is two parts. All answers must be in pdf file format. You will upload to the appropriate drop box.
- 5.1.1. One section is creating a batch file or script with the following elements.
  - 5.1.1.1. Identify the purpose of the batch file or script.
  - 5.1.1.2. Identify the creation date, any modification dates, and primary author.
  - 5.1.1.3. Identify any addition sources of help or information to create the batch file or script.
  - 5.1.1.4. Automatically verify the computer hash value of at least ten files. The computer hash must be a known good algorithm.
  - 5.1.1.5. Provide the current date in the file.
  - 5.1.1.6. Add a copy of the source code to the file.
- 5.1.2. One section is providing the complete output of running the batch file/script. The output will show the source code and verification of the hash value.

5.2. This section is two parts. All answers must be in pdf file format. You will upload to the appropriate drop box.
- 5.2.1. Provide evidence of successfully encrypting and decrypting at least ten files.
- 5.2.2. Provide evidence of another account unsuccessfully decrypting the files.

5.3. This section is five parts. All answers must be in pdf file format. You will upload to the appropriate drop box.
- 5.3.1. Provide evidence of an encrypted backup. (The backup must be at least one folder with at least 10 files.)
- 5.3.2. Provide written directions on how to create the encrypted backup previously demonstrated.
- 5.3.3. Provide evidence of a successful restore from the previous encrypted backup.
- 5.3.4. Provide written direction on how to restore from the encrypted backup.
- 5.3.5. Provide a procedure checklist if the password and encryption key is forever lost.

5.4. This section is two parts. All answers must be in pdf file format. You will upload to the appropriate drop box.
- 5.4.1. Provide evidence of successfully submitting your RFC 4880 compliant public key to the class key server. The key must expire at the end of the semester.
- 5.4.2. Provide the path to the file for your public/private key and permission settings.