

Name:

## **Information Assurance: Grad Project Topics**

For people taking the course for 4 credits, you will need to complete an extra project that will contribute 20% to your grade.

If you have a special passion in the area of security, feel free to suggest a topic or a project. Below are some topics that might be interesting. Let me know of a project interest, and I can work with you to identify additional papers to read or an interesting project to perform. Ideally, we have your project agreed upon by October 16 so you have plenty of time to complete it.

1. Wireless security – Latest developments in WPA security. Enterprise mode 802.1X security. Research work in ad hoc or sensor networks.
2. Malware – Work in analyzing worm characteristics. Work in detecting or preventing malware. Newly identified malware techniques.
3. Privacy – Techniques to avoid being traced.
4. Secure Hardware – Trusted Platform Module. RFIDs.
5. OS security – New features in VISTA. Security features in Linux (base or SE). Comparison of various “secure” \*nixes.
6. Email security – Analysis of a variety of secure email implementations.
7. VOIP security – Review of current industry security scenarios.
8. Security of electronic money systems – PayPal, Credit card networks, electronic funds transfers.
9. Intrusion detection and prevention – Examine different IDS/IPS tools.