CSE509 - System Security

Course Website: www.cs.sunysb.edu/~rob/teaching/cse509-fa13/

Details Available on course website:
- Grading Policy
- Reference Books
- Reading Assignments
- Project Details
- Class Notes

Topics:
1. Foundation of Computer Security
2. Threat Models
3. Operating System (OS) Security Models
4. Access Controls for Unix, Windows, Android and iOS
5. Software Security
6. OS level approaches to defend against problems (ARS)

Security:

Q: What is Security??

In simple words, "Security is computing in the presence of an adversary."

- Security Goals vs Attacker Goals

Threat Model - A model that depicts the possible attacks on a system and gives an idea of the attackers abilities. In general, we assume that the attacker knows the full design of the system to be attacked.
e.g. of Attacks:

a. Remanence - Physical Access
b. Amazon.com - Remote Access
c. Private Computing Mode (Incognito window in Google Chrome Browser)
   - Forensic Analyst
   - Logical vs Raw Access attackers
   - Non Simultaneous Access
d. System Breach Unrecoverable
e. Vendor Attack