Syllabus

#	date	topic	notes
1.	Fri, Oct 1	Introduction: what is computer security	
2.		*Discussion*: Trust, risk analysis, non-technical threats	
	Mon, Oct 4	***no class*** (SANS Network Security)	
3.	Wed, Oct 6	Robust programming rules and examples	
4.	Fri, Oct 8	Robust programming rules and examples (*con't*)	
		Discussion: Social engineering	
5.	Mon, Oct 11	Vulnerability models, attack models, relationship	**homework #1 due**
6.	Wed, Oct 13	Penetration analyses, Flaw Hypothesis Methodology	**project part 1 due**
7.	Fri, Oct 15	Intrusion detection	***last day to add course***
8.		*Discussion*: Classical cryptography; ROT-13, DES	
	Mon, Oct 18	***no class*** (National Information Systems Security Conf.)	
9.	Wed. Oct 20	Public-key cryptography; Diffie-Hellman; RSA	***last day to drop course***
10.	Fri, Oct 22	Access control matrix; security policies	
		Discussion: Policies at UC Davis	
11.	Mon, Oct 25	Security policies (*con't*)	**homework #2 due**
12.	Wed, Oct 28	Authentication: passwords, *crypt*(3), attacks	
13.	Fri, Oct 29	Users, groups, roles	**project part 2 due**
		Discussion: Review for midterm	
13.	Mon, Nov 1	***midterm***	
14.	Wed, Nov 3	Access control lists, capabilities, locks and keys	***last day to change to P/NP or S/U grading***
15.	Fri, Nov 5	Access rings, PACLs	
		Discussion: Go through midterm; S/Key	
16.	Mon, Nov 8	Malicious logic: Trojan horses, viruses, worms	**homework #3 due**
17.	Wed, Nov 10	Defending against malicious logic; property-based testing	
18.	Fri, Nov. 12	Auditing and logging	
		Discussion: Examples of famous malicious logic; isolation	

#	date	topic	notes
19.	Mon, Nov. 15	Secure systems; design hierarchy; trusted operating systems	
20.	Wed, Nov. 17	Network security; cryptography as a tool	
21.	Fri, Nov. 19	Analyzing network protocols	
		Discussion: Cryptographic protocols; X.509 failure	
22.	Mon, Nov 22	Security in network administration	**homework #4 due**
23.	Wed, Nov 24	Security in system administration	
	Fri, Nov 26	***no class*** (Thanksgiving)	
		Discussion: ***none*** (Thanksgiving)	
24.	Mon, Nov 29	Security in system use	
25.	Wed, Dec 1	Security in programming; principles and design	
26.	Fri, Dec 3	Security in programming: UNIX implementation	
		Discussion: UNIX security tools	
27.	Mon, Dec 6	Denial of service	**homework #5 due**
28.	Wed, Dec 8	Computability; HRU result, Take-Grant	
29.	Fri, Dec 10	*to be determined*	**project part3 due**
		Discussion: Review for final	
	Tue, Dec 14	***final exam***	

Please note that this syllabus is *tentative* and subject to change. If you want to hear about a topic not listed above, or that you are not sure we'll cover, please let me know!