Planned Syllabus

#	date	topic	notes
1.	Fri, Jan 4	Introduction; what is computer security	
	Fri, Jan 4	*Discussion*: class project	
2.	Mon, Jan 7	Robust programming	
3.	Wed, Jan 9	Robust programming (*con't*)	
4.	Fri, Jan 11	Security in programming: auditing and attacking	
	Fri, Jan 11	*Discussion*: security in programming	
5.	Mon, Jan 14	Security in programming: auditing and attacking (*con't*)	***homework 1 due***
6.	Wed, Jan 16	Flaw hypothesis methodology	
7.	Fri, Jan 18	Vulnerabilities analysis and models	
	Fri, Jan 18	*Discussion*: Security policies	
	Mon, Jan 21	***no class*** (Martin Luther King Day)	
8.	Wed, Jan 23	Access control matrix, HRU result, policy basics	
9.	Fri, Jan 25	Bell-LaPadula and confidentiality policy models	
	Fri, Jan 25	*Discussion*: Auditing and analyzing attacks	
10.	Mon, Jan 28	Biba, Clark-Wilson, and integrity policy models	***homework 2 due***
11.	Wed, Jan 30	More policy models	
12.	Fri, Feb 1	Basic cryptography: basis and classical, DES	
	Fri, Feb 1	*Discussion*: Policies	
13.	Mon, Feb 4	Basic cryptography: public key	
14.	Wed, Feb 6	Key management: Needham-Schroeder, PKI, others	
15.	Fri, Feb 8	Cipher techniques and randomness	
	Fri, Feb 8	*Discussion*: Review for midterm	
16.	Mon, Feb 11	***midterm***	***homework 3 due***
17.	Wed, Feb 13	Example cryptographic protocols: Secure RPC, others	
18.	Fri, Feb 15	Authentication	
	Fri, Feb 15	*Discussion*: Cryptographic protocols	
	Mon, Feb 18	***no class*** (Presidents Day)	
19.	Wed, Feb 20	Authentication (*con't*)	
20.	Fri, Feb 22	Design principles for security	
	Fri, Feb 22	*Discussion*: Midterm	
21.	Mon, Feb 25	Representing identity	***homework 4 due***
22.	Wed, Feb 27	Access control mechanisms: ACLs, C-Lists, ring	
23.	Fri, Mar 1	Information flow and the confinement problem	
	Fri, Mar 1	*Discussion*: Firewalls and network access	
24.	Mon, Mar 4	Confinement problem and malicious logic	
25.	Wed, Mar 6	Malicious logic	
26.	Fri, Mat 8	Auditing	

#	date	topic	notes
	Fri, Mar 8	*Discussion*: ***to be arranged***	
27.	Mon, Mar 11	Intrusion detection and response	
28.	Wed, Mar 13	Intrusion detection and response	***homework 5 due***
29.	Fri, Mar 15	Conclusion and review	
	Fri, Mar 15	*Discussion*: ***none*** (virtual Monday)	
	Wed, Mar 20	***final exam section 1***	10:30 AM to 12:30 PM
	Sat, Mar 23	***final exam section 2***	1:30 PM to 3:30 PM